

NO. 14-1470

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

CCI, INC.,

Appellant,

v.

JOHN MCHUGH, SECRETARY OF THE ARMY,

Appellee.

Appeal from the Armed Services Board of Contract Appeals in
ASBCA No. 57316, Administrative Judge Cheryl L. Scott

APPELLANT CCI, INC.'S OPENING BRIEF

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August 14, 2014

CERTIFICATE OF INTEREST

Pursuant to Federal Circuit Rule 47.4, counsel for Appellant CCI, Inc. (“CCI”) certifies that:

1. The full name of the party represented by me is CCI, Inc.
2. The name of the real party in interest represented by me is CCI, Inc.
3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party represented by me: CCI, Inc. is a wholly-owned subsidiary of Bristol Bay Native Corporation.
4. The names of all law firms and the partners or associates that appeared for the party now represented by me before the agency or are expected to appear in this court are: Lisa M. Marchese, Traeger Machetanz and Jonathan A. DeMella of the law firm of Dorsey & Whitney, LLP. When this case was before the Agency, Traeger Machetanz and Jonathan A. DeMella were with the law firm of Oles Morrison Rinker & Baker, LLP.

Dated this 14th day of August, 2014.

/s/ Lisa M. Marchese

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TABLE OF CONTENTS

CERTIFICATE OF INTEREST	i
TABLE OF CONTENTS	ii
TABLE OF AUTHORITIES	v
STATEMENT OF RELATED CASES	vii
I. STATEMENT OF JURISDICTION	1
II. STATEMENT OF ISSUES	1
III. STATEMENT OF CASE	3
A. Nature of the Case	3
B. Legal Background	4
C. Course of Proceedings	6
IV. STATEMENT OF FACTS	7
A. The RFP and Formation of the CCI Team	7
B. The RFP’s Representations of Subsurface Conditions	8
1. The Andrea Engineering Report	8
2. USAID Report	10
C. CCI’s Interpretation of and Reliance on the RFP’s Representations of Subsurface Conditions	11
D. CCI’s Site Visit	13
E. CCI’s Proposal and the Corps’ Award	14
F. Post-Award Design Phase	15
G. Delays Caused by Differing and Unforeseeable Subsurface Conditions	17
H. Submission, Implementation, and Completion of Recovery Plan	19

I.	The Corps' Denial of CCI's REA and Certified Claim	21
1.	CCI's REA	21
2.	CCI's Certified Claim	23
J.	The Board's Denial of CCI's Appeal	23
V.	SUMMARY OF ARGUMENT	25
VI.	ARGUMENT	28
A.	Elements Two and Three: CCI Reasonably Interpreted and Relied on the Subsurface Conditions Indicated in the Andrea and USAID Reports When Preparing its Proposal	29
1.	Standard of Review	30
2.	The Board Misapplied the Law in Holding that No Reasonable Contractor Could Have Concluded that the Indicated Site Conditions Would Support Construction from the Land	31
3.	The Board Misapplied the Law in Holding that No Reasonable Contractor Could Rely Exclusively on the RFP's Indications of Site Conditions	35
B.	Element Four: CCI Encountered Materially Different Subsurface Conditions at the Project Site	42
1.	Standard of Review	43
2.	The Board Misapplied the Law in Holding that the Site Conditions Encountered by CCI Were Not Materially Different from those Indicated by the RFP	44
C.	Element Five: The Materially Different Subsurface Conditions that CCI Encountered Were Reasonably Unforeseeable	46
1.	Standard of Review	47
2.	The Board Misapplied the Law in Holding that the Actual Conditions Encountered by CCI at the Project Site Were Not Reasonably Unforeseeable	48

D.	CCI Actually Relied on the Andrea Engineering and USAID Reports in Choosing its Means and Methods of Construction When Preparing Its Proposal.....	51
1.	Standard of Review.....	51
2.	The Board’s Finding that CCI Did Not Rely on the Andrea Engineering and USAID Reports Is Not Supported by Substantial Evidence.....	52
E.	CCI’s Damages Were Solely Attributable to the Materially Different Subsurface Conditions, but CCI Does Not Address This Issue at Length Because the Board Did Not Reach Quantum.....	60
VII.	CONCLUSION.....	61
ADDENDUM (ASBCA No. 57316)		
CERTIFICATE OF SERVICE		
CERTIFICATE OF COMPLIANCE		

TABLE OF AUTHORITIES

	Page(s)
CASES	
<i>Ace Constructors, Inc. v. United States</i> , 70 Fed. Cl. 253 (2006), <i>aff'd</i> , 499 F.3d 1357 (Fed. Cir. 2007)	5, 31, 36
<i>AAAA Enterprises, Inc.</i> , ASBCA No. 28172, 86-1 BCA ¶ 18628, <i>aff'd</i> , 824 F.2d 978 (Fed. Cir. 1987)	50
<i>Comtrol, Inc. v. United States</i> , 294 F.3d 1357 (Fed. Cir. 2002)	52
<i>E. Arthur Higgins</i> , AGBCA No. 76-128, 79-2 BCA ¶ 14050	36
<i>E.L. Hamm & Assocs., Inc. v. England</i> , 379 F.3d 1334 (Fed. Cir. 2004)	51, 53
<i>England v. Sherman R. Smoot Corp.</i> , 388 F.3d 844 (Fed. Cir. 2004)	31
<i>Foster Constr. C.A. & Williams Bros. Co. v. United States</i> , 435 F.2d 873 (Ct. Cl. 1970)	4, 30, 35, 38, 39, 41, 42, 45, 47, 48, 49
<i>H.B. Mac, Inc. v. United States</i> , 153 F.3d 1338 (Fed. Cir. 1998)	6, 32
<i>Int'l Tech. Corp. v. Winter</i> , 523 F.3d 1341 (Fed. Cir. 2008)	29
<i>McCormick Const. Comp., Inc. v. United States</i> , 18 Cl. Ct. 259 (1989), <i>aff'd</i> , 907 F.2d 159 (Fed. Cir. 1990)	42
<i>P.J. Maffei Bldg. Wrecking Corp. v. United States</i> , 732 F.2d 913 (Fed. Cir. 1984)	5, 30, 31, 39, 40, 51
<i>Pleasant Excavating Co. v. United States</i> , 229 Ct. Cl. 654 (1981)	31, 47
<i>Randa/Madison Joint Venture III v. Dahlberg</i> , 239 F.3d 1264 (Fed. Cir. 2001)	34, 49, 50
<i>Ruff v. United States</i> , 96 Ct. Cl. 148 (1942)	32

<i>Spirit Leveling Contractors v. United States</i> , 19 Cl. Ct. 84 (1989)	6
<i>Stuyvesant Dredging Co. v. United States</i> , 834 F.2d 1576 (1987).....	36, 37
<i>T.F. Scholes v. United States</i> , 357 F.2d 963 (Ct. Cl. 1966)	43, 44
<i>Travelers Cas. & Sur. Co. of America v. U.S.</i> , 75 Fed. Cl. 696 (2007)	30, 31, 36, 38, 39, 42, 43, 46, 48, 52, 57, 61
<i>United Contractors v. United States</i> , 368 F.2d (Ct. Cl. 1966)	31, 33, 46
<i>United States v. Atlantic Dredging Co.</i> , 253 U.S. 1 (1920)	40
<i>Weeks Dredging & Contracting, Inc. v. United States</i> , 13 Cl. Ct. 193 (1987), <i>aff'd</i> , 861 F.2d 728 (Fed. Cir. 1988)	5, 9, 12, 30, 43, 46, 48
<i>Woodcrest Const. Co. v. United States</i> , 408 F.2d 406 (Ct. Cl. 1969)	51
STATUTES AND REGULATIONS	
28 U.S.C. § 1295(a)(10)	1
41 U.S.C. § 7101	6, 23
41 U.S.C. § 7107	1, 4, 31, 51
FAR 52.236-2	4, 5, 25, 28

STATEMENT OF RELATED CASES

Pursuant to Federal Circuit Rule 47.5, counsel for CCI certifies:

1. I am unaware of any other appeal in or from the same civil action or proceeding in the lower court or board previously before this or any other appellate court.

2. I am aware of a case that may be directly affected by the Court's decision in this appeal:

a. The title of this case is *Polyearth Construction Int'l, LLC v. Bristol Bay Native Corporation; CCI, Inc.; Bristol Environmental and Engineering Services Corporation; and Joe Terrell*;

b. The number of this case is Case No. 3AN-10-11494CI;

c. This case is pending in the Superior Court for the State of Alaska, Third Judicial District at Anchorage.

Dated this 14th day of August, 2014.

/s/ Lisa M. Marchese

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I. STATEMENT OF JURISDICTION

This is an appeal from ASBCA No. 57316, a final decision by the Armed Services Board of Contract Appeals (the “Board”). The Board entered its final decision on March 14, 2014.

The Court has jurisdiction over this appeal pursuant to 28 U.S.C. § 1295(a)(10), whereby “[t]he United States Court of Appeals for the Federal Circuit shall have exclusive jurisdiction . . . of an appeal from a final decision of an agency board of contract appeals pursuant to section 7107(a)(1) of title 41.”

This appeal is timely because CCI received the Board’s final decision on March 21, 2014 and filed its Petition for Review on May 2, 2014, within the 120-day period set forth in 41 U.S.C. § 7107(a)(1)(A).

II. STATEMENT OF ISSUES

The issues presented for review in this appeal concern the merits of a certified Type I differing site conditions claim asserted by CCI in connection with a construction project (“Project”) for the U.S. Army Corps of Engineers, Gulf Region South District (“Corps”). These issues are as follows:

1. Whether the Board misapplied the law by evaluating CCI’s interpretation of the Corps’ representations of the site conditions from the perspective of an expert, rather than a reasonable and prudent contractor, and by

misinterpreting the request for proposals (“RFP”) as obligating CCI to perform an independent site investigation separate from and in addition to the site visit.

2. Whether the Board misapplied the law when it determined that no reasonable contractor could have relied on the Corps’ own representations regarding subsurface conditions at the Project site, despite case law establishing such reliance is reasonable, and despite being directed to do so by the Corps in bidding on a project in an active war zone.

3. Whether the Board misapplied the law when it determined that the site conditions encountered by CCI during construction were not materially different from the site conditions listed in the RFP, despite the Corps’ own admission that the conditions were materially different, and the drastic and costly revision to construction means and methods CCI was required to implement.

4. Whether the Board misapplied the law when it determined that the site conditions encountered by CCI were not reasonably unforeseeable based on information CCI could have learned from independent analysis of soil conditions, even though CCI was legally entitled to rely on both the representations in the RFP and the limited war zone site visit scheduled by the Corps.

5. Whether the Board’s finding that CCI did not rely on the RFP’s geotechnical information is supported by substantial evidence, when the record

evidence, including uncontroverted testimony from representatives of both CCI and the Corps, established that CCI relied on the RFP's geotechnical information.

III. STATEMENT OF CASE

A. Nature of the Case

This is a breach-of-contract case. On September 10, 2008, the Corps awarded CCI Contract No. W917BK-08-C-0059 ("Contract") in the amount of \$40,341,586.58 to complete the Umm Qasr Pier and Seawall Project in Iraq. A03351-464.

The RFP, issued on April 25, 2008, contained specific representations about the stability of subsurface soils at the Project site, and explicitly instructed prospective bidders to rely on the information provided. *See infra* § IV.B. The Corps' representations were particularly important given that the Project site was located in an active war zone where it would have been impossible to perform an independent geotechnical survey separate from and in addition to attending the site visit. *See infra* § IV.D. Accordingly, CCI followed the Corps' instructions and relied on these indications of subsurface conditions when preparing its Project bid. It consequently fashioned its bid based on the conclusion that the subsurface conditions would support its proposal to construct the Project from the land, as opposed to barges. *See infra* § IV.C.

Within days of commencing work, CCI encountered unstable subsurface conditions that differed materially from the conditions represented by the Corps as accurate in the RFP. *See infra* § IV.G. The Corps repeatedly acknowledged these conditions were unforeseeable. *Id.* To continue with the Project, CCI was forced to drastically revise the means and methods for construction on which its proposal had been based. *See infra* § IV.H. As a result, CCI incurred substantial additional costs amounting to \$40,064,759, *an amount nearly exceeding the Contract price itself.* *See infra* § IV.J. CCI nevertheless stuck with the project, and was so successful that it was awarded the 2011 International Construction Project of the Year by the Associated General Contractors of America. *See infra* § IV.H.

B. Legal Background

The Contract incorporated the Differing Site Conditions Clause FAR 52.236-2, which entitles a government contractor to an equitable adjustment for increased costs caused by site conditions that materially differ from those indicated in the contract. A04597. The purpose of FAR 52.236-2 is to transfer the risk of encountering adverse subsurface conditions from the contractor to the Government to discourage bidders from inflating their bids based on contingencies that may not occur. *Foster Constr. C.A. & Williams Bros. Co. v. United States*, 435 F.2d 873, 887 (Ct. Cl. 1970). To this end, a contractor is entitled to an equitable adjustment

if conditions materially differ at a site and cause an increase in the cost of performing any part of the work under the contract. FAR 52.236-2(b).

As set forth by FAR 52.236-2, a Type I differing site condition is a site condition encountered by a contractor that differs from what was indicated by the contract. *Ace Constructors, Inc. v. United States*, 70 Fed. Cl. 253, 268 (2006), *aff'd*, 499 F.3d 1357 (Fed. Cir. 2007). A contractor is entitled to recover additional costs attributable to a Type I differing site condition if it establishes by a preponderance that: (1) the Government issued an RFP containing representations of subsurface conditions; (2) the contractor reasonably interpreted the RFP; (3) the contractor reasonably relied on the RFP's indications of subsurface conditions; (4) the contractor encountered subsurface conditions at the Project site that differed materially from what the contractor reasonably expected from the RFP; (5) the materially different subsurface conditions encountered were reasonably unforeseeable based on all information available to the contractor at the time it submitted its proposal; and (6) the contractor's claimed additional costs were solely attributable to the materially different subsurface conditions. *Weeks Dredging & Contracting, Inc. v. United States*, 13 Cl. Ct. 193, 218 (1987), *aff'd*, 861 F.2d 728 (Fed. Cir. 1988). In determining whether these elements have been met, the court must place itself "into the shoes of a reasonable and prudent contractor." *P.J. Maffei Bldg. Wrecking Corp. v. United States*, 732 F.2d 913, 917

(Fed. Cir. 1984) (internal quotation marks omitted); *see also H.B. Mac, Inc. v. United States*, 153 F.3d 1338, 1347-48 (Fed. Cir. 1998) (applying “reasonable and prudent” standard to foreseeability element); *Spirit Leveling Contractors v. United States*, 19 Cl. Ct. 84, 94, 97 (1989) (applying “reasonable and prudent” standard to all three elements involving questions of reasonableness).

C. Course of Proceedings

In 2009, seeking to recoup its additional costs under the Differing Site Conditions Clause, CCI submitted a request for equitable adjustment (“REA”), which the Corps denied. A03572-97; A03845. Thereafter, in February 2010, CCI submitted a certified claim pursuant to the Contract Disputes Act (“CDA”), 41 U.S.C. § 7101, *et seq.*, in which it re-stated and elaborated on why it was entitled to compensation for the additional costs stemming from Type 1 differing site conditions. A03526-70. In July 2010, the Corps denied CCI’s certified claim. A03315-50.

CCI filed a timely appeal of the Corps’ decision and, after preliminary proceedings, the Board conducted a 15-day hearing in May and June 2012. A18333-52; A00002. During this hearing, CCI presented substantial evidence demonstrating that it had reasonably interpreted and relied on the RFP’s representations of subsurface conditions at the Project site when preparing its proposal, but that it encountered materially different and reasonably unforeseeable

conditions forcing it to change its means and methods of construction at significant additional cost. The Board, however, issued a final decision denying CCI's appeal, A00002-55, which CCI received on March 21, 2014. A00001.

On May 2, 2014 CCI filed a timely petition for review. ECF No. 1.

IV. STATEMENT OF FACTS

A. The RFP and Formation of the CCI Team

On April 25, 2008, the Corps issued an RFP for the planning, design, construction, and improvement of a pier and seawall for the Iraqi Navy in Umm Qasr, Iraq on the west bank of the Khawr Al Zubar River. A04514-602. The Project was part of the Foreign Military Sales program, a significant component of the United States' efforts to promote security in the Gulf Region during the Iraq War. A04514. Shortly after the Corps issued the RFP, CCI's then president and CEO, Keith Burke, learned about the Project from his colleagues, Lee Nunn and Samuel Pelant of PolyEarth Construction, International LLC ("PCI"). A00126.

Mr. Nunn, a licensed professional engineer and former Corps Alaska District Engineer—the largest Corps District in the United States—had significant experience working on other major construction projects in Iraq and elsewhere in the Middle East. A00406-07; A00411-13. Together with Mr. Pelant, Mr. Nunn decided to assemble a team to submit a Project proposal. A00416-17. By the time they contacted Mr. Burke, Mr. Nunn and Mr. Pelant had already recruited Dennis

Nottingham of PND Engineers, Inc. (“PND”), a renowned professional civil engineer who invented and patented an award-winning method for constructing docks and piers called the “OPEN CELL SHEET PILE STRUCTURE ©.”¹ A00277; A00295; A00418-19. Having already assembled a highly skilled and experienced team of Project engineers, Mr. Nunn and Mr. Pelant asked CCI to join PCI and PND by funding the Project—CCI agreed. A00126-29.

B. The RFP’s Representations of Subsurface Conditions

As relevant to the issues on appeal, the RFP contained two reports that made key representations regarding the subsurface conditions at the Project site.

1. The Andrea Engineering Report

Included as Appendix C to the RFP was a document prepared by Andrea Engineering Tests Laboratory entitled, “Report on Site Investigation for Dock at Um Qasr Port at Basrah Governorate” (“Andrea Engineering Report”). A04800-23. The Andrea Engineering Report provided prospective bidders with the geotechnical data necessary to prepare a Project proposal. Although the RFP initially referred to the Andrea Engineering Report as “for information only,” A04701, the Corps issued an amendment expressly instructing bidders to rely on

¹ The OPEN CELL system is a construction method through which a pier and seawall are built by creating “cells” with flat sheet pile, filling these cells with soil, and then anchoring the soil-filled cells to one another. A00279-283; A11156 (picture).

the report as indicative of site conditions. A04833. This direction was issued in response to CCI's request to the Corps for broader soil data:

Question 11: Soil investigation not enough we need more point of locations.

Id.; A00312. The Corps responded by instructing that CCI should use the data in the report as representative of the entire site in making its bid, stating:

Answer 11: The best soil investigation data available to the government is provided in Appendix-C Geotechnical investigation of the [Scope of Work]. The contractor should assume the data provided in Appendix C is representative of the project site.

A04833.

Critically, the Andrea Engineering Report soil data came from three boring logs indicating the composition and strength of subsurface conditions.² A04816-19. Before submitting its bid, CCI had even asked the Corps whether these boring logs were representative of all soil conditions at the site:

Question 42: Geotechnical Conditions: Will the government be providing any bidding assumptions associated with the existing geotechnical conditions? For bidding purposes, should the contractor assume the three borings provided are representative of the entire site?

A04838; A00313. The Corps confirmed that the boring logs were representative, stating:

² "Borings are a field sampling procedure whereby subsurface soil information is acquired through drilling or driving a sampling device." *Weeks*, 13 Cl. Ct. at 196; A00322-32 (testimony explaining significance of boring logs).

Answer 42: The contractor should assume the three borings provided are representative of the entire site for the purposes of developing a proposal. However, additional geotechnical information may be required during the design phase of this project.

A04838.

Importantly, the Corps' comment in Answer 42 regarding "additional geotechnical information" did not relate to bidding assumptions or otherwise indicate that bidders were expected to collect additional information about subsurface conditions when preparing their bids. Rather, the comment referred exclusively to geotechnical information required for the Project's "design phase," which only occurs post-award. A03442 (describing post-award stages of design phase); A00315-16; A01213-15. In other words, more geotechnical information may need to be gathered as part of the contractor's design confirmation *after* the contract has been awarded.

2. USAID Report

Along with the Andrea Engineering Report's indications of subsurface conditions, the RFP contained a document entitled, "Umm Qasr Port Assessment," which was prepared in April 2003 for the U.S. Agency for International Development ("USAID Report"). A04848-73. The USAID Report contained a "general assessment of functions at the port and historical dredging operations at the port." A18354.

C. CCI's Interpretation of and Reliance on the RFP's Representations of Subsurface Conditions

In preparing its proposal, the team of CCI, PCI, and PND (collectively, “CCI” or “CCI team”)—including the team’s most prominent engineers, Mr. Nottingham and Mr. Nunn—reviewed the Andrea Engineering Report, the USAID Report, and the rest of the materials accompanying the RFP. A00302; A00421. Relying on the Andrea Engineering Report, the CCI team concluded that Mr. Nottingham’s OPEN CELL system provided the optimal design for building the Umm Qasr pier and seawall. A00419-20.

Moreover, the CCI team relied on the Andrea and USAID Reports to conclude that the optimal means and methods for installing the OPEN CELL system was a land-side construction approach. Land-side construction—whereby construction occurs through the use of a crane located on the shore—is the standard approach for installing an OPEN CELL system. A00421. It is considerably more efficient and cost effective than marine-side construction, which requires placing cranes on floating barges. A00292-94; A00422. The Corps reacted “very positive[ly]” to CCI’s proposal to construct the OPEN CELL system from the land. A00419-20.

In concluding that the Project site was suitable for land-side construction, Mr. Nottingham relied specifically on split spoon blow count data contained in the

Andrea Engineering Report's Boring Log No. 2.³ A00328-34. The significance of this data cannot be overstated because Borehole No. 2 was close to the precise location where CCI planned to install the crane pad from which it would build the pier and seawall. A00323.

As Mr. Nottingham explained, blow count data is “the most reliable information” about subsurface conditions because, unlike subjective verbal descriptions, blow counts are objective, “undisturbed samples.” A00330-33. Mr. Nottingham relied on the blow counts from Borehole No. 2 to conclude that the subsurface conditions in this location were stable enough to support a crane pad. A00333-34. In reaching this conclusion, Mr. Nottingham placed greater emphasis on the objective blow count data than on the subjective descriptors provided with this data. A00330-33. He also considered the blow counts from Boreholes Nos. 1 and 3. A00333. These blow counts were generally consistent with the blow counts from Borehole No. 2, thereby providing confirmatory data. *Id.*

Additionally, Mr. Nottingham and the CCI team relied on the Corps' Answers 11 and 42, which as explained above, *see supra* IV.B.1, were provided in

³ A “split spoon blow count” is an objective measurement of soil density. To take such a measurement, a “split spoon”—which is essentially just a round tube—is driven into the ground with a 140-pound hammer. A00324-25. The “blow count” is the number of “blows” with the hammer it takes to achieve a one-foot increase in depth, so, the higher the blow count, the greater the soil density. *Id.*

response to CCI's questions, and directed bidders to rely on the Andrea Engineering Report and boring logs as indicative of the entire Project site. A00312-13; A00314-15.

Finally, in deciding that the RFP's indications of site conditions supported a land-side construction approach, Mr. Nottingham reviewed and relied upon the USAID Report supplied by the Corps to conclude that shoaling patterns in the river were not a threat to soil stability. A00302-09 (sometimes referring to USAID Report as "Abam report"). Although the USAID Report showed a history of dredging operations upstream from the Project site, A00305-06; A04864, Mr. Nottingham concluded that shoaling would not be a problem because the Project site was located on the outside of a bend in the river where the current would be too fast for shoaling to occur. A00308-09.

D. CCI's Site Visit

On May 17, 2008, Aqueel Abbas, an engineer with PCI's local teaming partner, attended a site inspection hosted by the Corps on behalf of the CCI team. A00422. Mr. Abbas attended the site visit because the short bidding period made it impossible to obtain contractor access cards, credentials that were required to travel to the Project site. A00422-23. Moreover, the site was located in an active war zone where military regulations required armed transportation escorts due to

the threat of kidnapping or attack. A01215-16; *see also* A03375; A15470; A09311; A00693-94.

The site visit was led by representatives from the Corps who were accompanied by armed security personnel. A01658-59. The visit was conducted at or near high tide when significant portions of the Project site were submerged in water, A01664-71, and was only 90 minutes long. A01655. Also, significant portions of the visit took place from behind a fence. A01671; *see also* A11837-39 (photos showing distance from Project site). Accordingly, Mr. Abbas was prevented from observing any conditions that might have raised concerns about the suitability of a land-side construction approach or the accuracy of the Andrea Engineering Report. A00335-36.

What is more, the Corps put to rest any remaining questions bidders may have had about the stability of subsurface conditions because its June 6, 2008 response to Questions 11 and 42 came after the site visit. A04826. As instructed by the Corps following the visit, bidders were to rely on the Andrea Engineering Report and the boring log data it contained as “representative of the entire site for the purposes of developing a proposal.” A04833; A04838.

E. CCI’s Proposal and the Corps’ Award

In May 2008, CCI submitted an initial Project proposal. A11856-60. Then, after receiving Corps approval, CCI submitted a revised proposal in August 2008,

specifically offering to complete the Project using an OPEN CELL system constructed from the land. A12160-61; A12183-86. CCI made clear, by among other things attaching a photograph to the proposal explaining the OPEN CELL system, A12040; A05130 (in color), that it planned to construct the Project from the land. This is not only the standard approach for installing an OPEN CELL system, but also much more efficient and cost-effective. A00282-83.

In September 2008, the Corps accepted CCI's offer to construct an OPEN CELL system from the land, even though CCI's proposal was not the lowest priced bid submission it had received. A12206; A15981. The Corps then awarded CCI the Umm Qasr Pier and Seawall Contract in the amount of \$40,341,586.58, with an anticipated completion date of September 27, 2009. A03351-464.

F. Post-Award Design Phase

Unlike the RFP, which did not require CCI to perform an independent geotechnical survey prior to submission of its proposal, the Contract required CCI to commission a geotechnical investigation during the post-award design phase. A03454-55 (Contract's Scope of Work). This was not for the purpose of confirming the feasibility of its already accepted and binding bid proposal, or the means and methods for constructing the dock and pier contained in that accepted bid. Rather, this was for the sole purpose of confirming the details of CCI's design plan for the pier and seawall. A00315 (Mr. Nottingham: "Q: [W]as the expectation

that additional geotechnical testing would be needed after the award for the design itself? A: Yes.”); A04838 (Answer 42: “additional geotechnical information may be required during the design phase of this project” (emphasis added)).

Accordingly, shortly after being awarded the Contract, CCI commissioned the University of Basrah College of Engineering to perform a geotechnical survey of the Project site to confirm the details of its OPEN CELL design. A00434-35; A03854-99. As required, the purpose of this survey was to confirm the design of the pier and seawall; it was not to confirm CCI’s construction methods. A00315-17 (Mr. Nottingham: “Q: [W]as that testing to confirm your means and methods of construction or was that testing to be done relative to the design itself? A: It was to verify our design.”).

While this University of Basrah geotechnical study was in progress, the Corps was concurrently reviewing the CCI team’s OPEN CELL design. Not only did it perform a Technical Review and Clarification of the design, A13851-60, but the Corps also requested that the U.S. Army Engineering Research and Development Center (“ERDC”) perform a separate review. On January 6, 2009, ERDC released its engineering review, confirming the design’s feasibility and benefits over a standard dock design. A12405-33.

G. Delays Caused by Differing and Unforeseeable Subsurface Conditions

On March 28, 2009, construction began. A02043. The first work activity was to install a temporary work road and a crane pad. A00346. Within days, however, CCI discovered unforeseen subsurface conditions that substantially hindered its efforts to install the temporary road and crane pad. Unfortunately, the Andrea Engineering Report's geotechnical data was not, as the Corps specifically instructed bidders to assume, "representative of the entire site[.]" See A04838. The Corps' own expert, Mr. Hartman, confirmed this fact when he later testified: "I would have to say that you would not use that data as representative of the entire site[.]" A16858. In reality, the soil underlying the Project site contained higher concentrations of silt and weaker clay than were indicated by the RFP, making the ground much less stable than was necessary for land-side construction. A00799-80; A00815; A13947-49. Thus, as CCI deposited fill material for the crane pad, the weak soil underneath gave way, rendering the material insufficient to support the weight of the crane pad. A03600; A11764 (photograph).

On April 22, 2009, CCI briefed the contracting officer's representative, Lt. Gutierrez, on the unexpected subsurface conditions it had encountered at the Project site. A03620. "He agreed that something 'odd' was occurring at the pad." *Id.* On April 30, 2009, CCI sent him a preliminary request for a time extension to

complete the Project. A03979. Lt. Gutierrez instructed CCI: "This request for time extension should be noted as an unforeseen condition." A03978-79.

On May 2, 2009, Lt. Gutierrez summarized: “The main portion of [CCI’s] delay has been caused by an unexpected field condition in placing their crane pad. There is evident instability at the 25m mark in the tidal zone that has impeded progress because fill material begins to creep/slide into the river.” A13371 (emphasis added); A12640 (repeating assessment to chain of command). At no point during this period did Lt. Gutierrez criticize CCI’s design choices, construction work, means and methods, or efforts to address soil instability. A00453-54. Rather, he was complimentary of CCI’s efforts. A02103-04.

After acknowledging the existence of a changed condition, the Corps issued a change order for CCI to drain three dredge ponds adjacent to the work pad that the Corps believed were to blame for the unforeseen subsurface conditions. A03493-95. This was recognition that CCI had encountered site conditions that differed materially from what was represented in the RFP. Moreover, the Corps acknowledged that these conditions were unforeseeable from the RFP when Lt. Gutierrez stated: “There was no provision in the contract that would have predicted this existing condition” A012649. Thus, the Corps effectively conceded that CCI had encountered a differing site condition for which it was entitled to recover its costs.

H. Submission, Implementation, and Completion of Recovery Plan

In July 2009, as a result of the differing site conditions, CCI submitted a recovery plan in which it revised its projected completion date from September to November 2009. A13169-72. CCI's recovery plan shifted its construction method from a land-side to a marine-side approach, whereby it would install the OPEN CELL system from cranes placed on barges with the assistance of a new Project team member, Brad West Construction Company. A13171-72. Despite the significant challenges it had encountered and the exorbitantly high costs associated with switching to marine-side construction, CCI felt strongly about honoring its commitment to the Corps by completing the Project. A00161 (Mr. Burke: "[W]e signed a contract with the Corps of Engineers to build here for a facility for the Iraqi navy. And that's a serious commitment."). On July 23, 2009, the Corps accepted CCI's recovery plan. A03802-03.

To switch from land-side to marine-side construction, CCI needed six barges, three tug boats, three cranes, and an array of other heavy machinery. A13171-72; A13180-83. Although the team immediately began efforts to procure this equipment and initiate its recovery plan, A00607, it encountered significant obstacles—the few available vendors were reluctant to send equipment into an active war zone, and/or appeared to lack the permits necessary to deliver the equipment to Iraq. *See, e.g.*, A00609-10; A04257 (difficulties with vendor, Blue

Danube). As a result, final delivery of the necessary equipment did not occur until November 2009. A08754.

Moreover, the changed conditions that CCI had encountered continued to obstruct its construction efforts. On November 2, 2009, for example, critical fill material once again failed, despite CCI's meticulous attention to the instructions it had received from ERDC concerning its views on how best to accommodate and overcome the changed conditions. A01090-92 (testimony from CCI's on-site representative that CCI was dutifully following ERDC's instructions and that the fill material should not have failed based on the ERDC report); A04328-30. Notwithstanding these obstacles, CCI presented a revised recovery plan to complete the Project by June 2010. A13830-33.

Ultimately, despite the difficulty of procuring heavy construction equipment in an active war zone, A00609-10, as well as the ongoing challenges caused by unstable subsurface conditions, CCI completed the Project in June 2010. A00692. For its success under such difficult circumstances, the Associated General Contractors of America later awarded CCI its annual award for 2011 International Construction Project of the Year. A00632.

This achievement, however, came at a crippling and devastating cost. In total, CCI has incurred \$40,064,759 in additional costs as a result of the differing site conditions it encountered at the Project site. A01439-41; A14485-578.

I. The Corps' Denial of CCI's REA and Certified Claim

1. CCI's REA

In August 2009, CCI submitted an REA to the Corps for the additional costs it had incurred during the Project thus far as a result of the weak and unforeseeable soil conditions. A03572-97. At this point, the Corps had already acknowledged that the subsurface conditions at the Project site were materially different from those indicated by the Andrea Engineering Report. A13232 (Lt. David Daigle: “I did find some strong inconsistencies from the testing and the data we have been provided.”). Lt. Gutierrez also confirmed that CCI had encountered a differing site condition: “[T]he problem started and is tied to an unforeseen sight [sic] condition[.]” A13519. Further, as Major Gregory Himes later testified: “[I]t is clear in a number of documents, but also in the REA, that the contractor clearly relied upon what was in the Andrea [Engineering] Report.” A01865.

On September 18, 2009, after being assigned by the Corps to evaluate the REA, ERDC delivered a final report confirming that CCI's interpretation of the Andrea Engineering Report was reasonable. A05040-58. ERDC's final report was "based solely on the geotechnical information that the government made available for contract bidding." A05045. Although ERDC observed that a verbal descriptor in the Andrea Engineering Report of "very soft to soft" soil should have served as a cause for concern, A05045, ERDC ultimately concluded, consistent with the

assumptions upon which the CCI team based its proposal, that it was reasonable for bidders to assume the soil would support fill material up to a height of somewhat greater than three meters. A05044 (“[I]t is probably reasonable to conclude that the foundation clays will be unable to support the weight of the fill for heights much greater than 3m.”). By contrast, the soil encountered by CCI failed well before the fill material placed at the Project site exceeded a height of three meters. A04328; A00815-16.

Nevertheless, the Corps eventually denied CCI’s REA. A03845. As CCI later came to learn, the Corps had delayed its denial of the REA to ensure that the barges CCI was working diligently to procure would be at the Project site before CCI was informed that the REA was denied. A16698-99 (Deposition Testimony of Col. Knippel). CCI also learned that the Corps perhaps had ulterior motives in refusing to compensate CCI for the extra costs it had incurred—which would require asking for more funding from the Iraqi Military—solely to promote its own hopes for future Foreign Military Sales:

LTG Helmick told his staff that this project is crucial to the future of the FMS program in Iraq. We are talking billions of dollars of weapons systems purchases. As such, he stated that he was not going to ask the Iraqi’s for one more penny of funding

A13629; *see also* A01947-48.

2. CCI's Certified Claim

On February 8, 2010, CCI submitted a certified CDA claim explaining in greater detail why it was entitled to compensation for the additional costs it had incurred to date. A03526-70. On July 9, 2010, the Corps denied CCI's claim. A03315. The denial was issued by a Corps member, Ilene Crapps, who had no former experience with the Project or similar projects. A15683-85. Stunningly, Ms. Crapps reached her decision to deny the claim without interviewing Project personnel, A15699-700, reviewing relevant correspondence, A15700, considering Questions 11 or 42, A15736-42, or otherwise becoming acquainted with the particular facts necessary to render an informed decision. A15744; A15746-47.

J. The Board's Denial of CCI's Appeal

In August 2010, CCI filed an appeal with the Board in which it contested the Corps' decision to deny its certified Type I differing site conditions claim. A18334. By this point, CCI's additional costs resulting from the weak soils had increased to \$40,064,759. A01439-41; A14485-578. Over the course of a 15-day hearing, CCI presented credible testimony from six lay witnesses and three expert witnesses demonstrating that, after reasonably interpreting and relying on the descriptions of subsurface conditions contained in the Andrea and USAID Reports, it had encountered reasonably unforeseeable conditions at the Project site that differed materially from those indicated by the reports provided with the RFP.

But on March 14, 2014, the Board denied CCI's appeal. A00002-55. According to the Board, while CCI had carried its burden to establish that the RFP contained affirmative indications of Project site conditions, it determined that CCI had not carried its burden with respect to other legal elements necessary to prove a differing site conditions claim. A00048-54. Specifically, the Board determined that: (1) any absolute reliance on the Andrea Engineering and USAID Reports would have been unreasonable, A00049; (2) CCI did not actually rely on the RFP's indications of Project site conditions in preparing its proposal, A00049-51; (3) even if CCI did rely on the RFP's indications of site conditions, it did not interpret them reasonably, A00051; (4) the site conditions actually encountered by CCI during construction were not materially different from those indicated by the RFP, A00051-52; and (5) the site conditions encountered by CCI were not reasonably unforeseeable based on the information available at the time it submitted its proposal, A00052-54. Separately, the Board noted that, assuming CCI had in fact encountered differing site conditions, it had not proved that all of its additional costs were attributable to these conditions. A00054. The Board, however, emphasized that it had included this point only for the sake of argument because it had declined to reach quantum. *Id.*

On May 2, 2014, CCI appealed the Board's final decision to this Court. ECF No. 1.

V. SUMMARY OF ARGUMENT

After reasonably interpreting and relying on the Corps' representations of subsurface conditions in the RFP to conclude that constructing the pier and seawall from the land would be feasible, CCI encountered materially different and reasonably unforeseeable conditions at the Project site. These differing conditions forced it to drastically revise its means and methods of construction at extraordinary additional costs. As such, CCI is entitled to its additional costs pursuant to the Differing Site Conditions Clause FAR 52.236-2. The Board's decision should be reversed because its conclusion that CCI is not entitled to recover these additional costs is based on: (1) a misapplication of the law applicable to claims for differing site conditions; and (2) a finding of fact that is not supported by substantial evidence.

The Board misapplied the law because it concluded that a reasonable contractor would have conducted an independent geotechnical survey when preparing its proposal separate from and in addition to attending the site visit, notwithstanding that: (1) the Project site was located in an active war zone where travel was both dangerous and impracticable in the time provided for submitting a proposal; (2) the Corps specifically instructed bidders to rely on geotechnical information contained in the RFP for the entire site; (3) bidders have a legal right to rely on geotechnical information furnished by the Government when bidding on

construction projects; and (4) well-established precedent encourages bidders to rely on geotechnical information furnished by the Government.

In reaching this erroneous conclusion, the Board misinterpreted the Contract's requirement that CCI conduct a post-award geotechnical investigation to confirm its design for the pier and seawall, and charged CCI with what it would have learned from such an undertaking prior to submitting its bid. The Board reached this result even though this post-award contractual requirement did not relate to construction methods, and in no way obligated CCI to conduct a pre-award geotechnical investigation prior to submitting a binding bid on the Project.

The Board also misapplied the law because it failed to apply the correct legal standard in deciding whether CCI's interpretation of the RFP was reasonable. Instead of evaluating the reasonableness of CCI's interpretation from the perspective of a reasonable and prudent contractor, the Board examined this issue from the perspective of an expert. Properly applied, this legal standard shows that CCI's principal engineer, Mr. Nottingham, reasonably and prudently evaluated the RFP by placing greater emphasis on objective data about the soil characteristics of subsurface conditions than on subjective verbal descriptions that are less reliable.

The Board's errors of law on the foundational question of what CCI should have understood the contract to mean infect the rest of its factual determinations, and these errors are consequently dispositive with respect to four of the five issues

presented for review. First, the Board's conclusion that any absolute reliance on the Andrea Engineering or USAID Reports would have been unreasonable is based on its mistaken belief that a reasonable contractor would have refused to rely on these reports and would have instead conducted an independent, pre-bid geotechnical study related to construction methods. It is also based on a misinterpretation of the Contract, which did not, as the Board appears to have believed, require CCI to conduct a pre-award geotechnical investigation separate from and in addition to attending the site visit.

Second, the Board's determination that CCI's interpretation of the RFP was unreasonable results from evaluating this element from the perspective of an expert rather than a reasonable and prudent contractor, and from failing to acknowledge the reasonableness of Mr. Nottingham's decision to place greater emphasis on objective soil data than on subjective narrative descriptions.

Third, the Board's holding that actual site conditions did not differ materially from what a reasonable contractor could infer from the RFP is flawed because it flows from the Board's incorrect determination that CCI's interpretation of the RFP was unreasonable.

Fourth, the Board's conclusion that actual site conditions were not reasonably unforeseeable is based on having improperly charged CCI with the knowledge of what it could have learned from conducting an impracticable and

legally unrequired independent, pre-bid site investigation. Based on these errors of law, the Board's decision should be reversed.

Finally, the Board issued a finding of fact that is not supported by substantial evidence because it found there was "no persuasive evidence" that CCI actually relied on the Andrea Engineering and USAID Reports when preparing its proposal—despite undisputed testimony from Mr. Nottingham and Mr. Nunn stating that they relied on the RFP when choosing CCI's means and methods of construction. The evidence cited by the Board in support of this erroneous finding is insufficient to overcome the weight of Mr. Nottingham's and Mr. Nunn's testimony. Accordingly, this finding of fact is not supported by substantial evidence and should be reversed.

Because CCI has established that it is contractually entitled to recover the additional costs it incurred as a result of a differing site condition, the Board's decision should be reversed and this case should be remanded for a determination on quantum.

VI. ARGUMENT

The Board erred by misapplying the law and making findings of fact that are not supported by substantial evidence when it determined that CCI did not prove a Type I Differing Site Condition and was not entitled to compensation pursuant to FAR 52.236-2. At the hearing, CCI presented substantial evidence establishing the

elements of a claim for differing site conditions. Yet the Board found that CCI had not established the second, third, fourth, or fifth elements of the differing site conditions test.

As demonstrated below, the Board made significant legal errors that undermine its conclusions with respect to each of these elements, all of which are inextricably tied to the reasonableness of CCI's pre-award conduct in preparing its proposal. These errors present questions of law that should be reviewed *de novo*. Although many of these elements often involve questions of fact,⁴ this case is different because the Board's determinations are fundamentally predicated on errors of law about the meaning of language in the contract itself.

In addition to its errors of law, the Board made a clear factual error when it found that CCI had not established actual reliance because this finding is not supported by substantial evidence. Accordingly, the Board's ruling should be reversed and remanded for a determination of quantum.

A. Elements Two and Three: CCI Reasonably Interpreted and Relied on the Subsurface Conditions Indicated in the Andrea and USAID Reports When Preparing its Proposal

The second and third elements of a Type I differing site conditions claim—whether the contractor reasonably interpreted the contract and whether the contractor reasonably relied on the contract's indications of subsurface

⁴ See, e.g., *Int'l Tech. Corp. v. Winter*, 523 F.3d 1341, 1349 (Fed. Cir. 2008).

conditions—“are best addressed, in the interests of logic and brevity, as a single element.” *Weeks*, 13 Cl. Ct. at 224. This requires a general inquiry into the reasonableness of the contractor’s pre-award conduct. *Id.*; *Travelers Cas. & Sur. Co. of America v. U.S.*, 75 Fed. Cl. 696, 720 (2007) (“The *sine qua non* for prevailing upon a Type I differing site condition claim is reasonableness[.]”). Here, contrary to the Board’s ruling, the only possible legal conclusion is that CCI reasonably interpreted and relied on the Government’s affirmative representations about the site conditions.

1. Standard of Review

Whether CCI’s interpretation of the site conditions indicated in the RFP was reasonable is a question of law. *Foster*, 435 F.2d at 880. Similarly, in this case, whether CCI’s reliance on the site conditions indicated in the RFP was reasonable is also a question of law because the Board denied CCI its right to rely on the boring logs provided by the Corps. *See id.* at 886-88 (emphasizing that Board’s decision was “erroneous as a matter of law” for denying bidders’ their right to rely on boring logs furnished by Government); *see also P.J. Maffei*, 732 F.2d at 917 (discussing issue of whether reliance was “justified” as a question of law).⁵

⁵ This is also the only standard that could be applied where the Board erred on the foundational question of what the site conditions could reasonably be interpreted to mean, prior to analyzing whether CCI reasonably relied on the site conditions. *See* A00049 (analyzing reasonableness of reliance based on misconception that CCI was required to perform further pre-bid site investigation).

Questions of law are reviewed *de novo* without deference to the Board. 41 U.S.C. § 7107(b)(1); *England v. Sherman R. Smoot Corp.*, 388 F.3d 844, 848 (Fed. Cir. 2004) (“We review a decision of the ASBCA on questions of law without deference.”).

2. The Board Misapplied the Law in Holding that No Reasonable Contractor Could Have Concluded that the Indicated Site Conditions Would Support Construction from the Land

The Board erred when it concluded that CCI’s interpretation of the RFP was unreasonable. When interpreting an RFP, a reasonable and prudent contractor is not “bound to know that which only an expert could derive from bidding materials.” *Pleasant Excavating Co. v. United States*, 229 Ct. Cl. 654, 656 (1981). Moreover, the contractor is not required to demonstrate that its interpretation of the contract is the “*only* reasonable [interpretation]” *P.J. Maffei*, 732 F.2d at 917 (emphasis in original). Rather, the contractor must only show that its interpretation was that of “a reasonable, intelligent person acquainted with the contemporaneous circumstances.” *Ace Constructors*, 70 Fed. Cl. at 267 (brackets omitted). And, “[u]nlike traditional contract interpretation, in a differing site condition claim, a contractor is permitted to make inferences from a contract’s implications.” *Travelers*, 75 Fed. Cl. at 712. Where an RFP contains inconsistent descriptions of soil conditions, specific data trumps generalized descriptions or disclaimers. *United Contractors v. United States*, 368 F.2d, 585, 598 (Ct. Cl. 1966).

The Board did not correctly apply this legal standard because it evaluated CCI's interpretation of the RFP materials from the perspective of an expert, rather than from the perspective of a reasonable and prudent contractor.⁶ *Cf. H.B. Mac, Inc.*, 153 F.3d at 1345 (“[The] standard is whether, without qualification, the contractor acted reasonably and prudently.”). The Board concluded that, because the experts CCI retained for these legal proceedings noted some inconsistencies in the Andrea Engineering Report, CCI should have known when it submitted its bid that land-side construction would not be feasible. A00051. But this is “wisdom after the event.” *Ruff v. United States*, 96 Ct. Cl. 148, 164 (1942) (rejecting unrealistic *post hoc* interpretation of bidding materials). It also ignores the relevant inquiry: was it reasonable for CCI to interpret the RFP's indications of site conditions as sufficient for land construction, particularly given the assumptions the Corps required CCI to make?

All of CCI's experts testified that its interpretation was reasonable. A00799-80; A00803 (Mike Hartley: Andrea Engineering Report data indicated land-side approach would be stable, including when using industry standards for normalizing blow counts); A00966 (Mr. Hoque: Andrea Engineering Report “should support normal construction equipment”); A01226 (Mr. Lyman: Andrea data indicated

⁶ As is evident from the decision, the Board relied substantially on expert testimony to conclude that CCI's interpretation of the RFP was unreasonable. *See* A00051 (citing testimony from four expert witnesses in assessing the reasonableness of CCI's interpretation).

land-side construction was feasible). In fact, the Andrea Engineering Report itself confirmed the reasonableness of this interpretation when it stated that, if unstable soils were encountered, these conditions could be stabilized through the use of pile foundation or by replacing or improving the soil. A04810. Further, even the Corps' own post-award ERDC Report confirms that CCI's interpretation was "probably reasonable." *See supra* § IV.I.1.

Moreover, CCI did not ignore inconsistencies contained in the Andrea Engineering Report. Rather, CCI's primary engineer, Mr. Nottingham, reconciled them by favoring specific, reliable, and objective soil data in the report over general, less reliable verbal descriptions, an approach supported by case law. *United Contractors*, 368 F.2d at 598 (reversing Board because it erred by promoting "low-key message" of general language over "specific information" contained in boring logs). As Mr. Nottingham testified, he accounted for the Andrea Engineering Report's description of "very soft to soft" soils by placing more emphasis on the blow count data, which is the "most reliable information you have." A00333. Thus, Mr. Nottingham did not completely "discount" the verbal descriptors. A00053. He considered them "secondary" to blow count data and less reliable. A00333. As discussed at length in the next section, this was the same blow count data the Government specifically instructed CCI to read as applicable to the entire site. *See infra* § VI.A.3.

The reasonableness of Mr. Nottingham's decision to place greater emphasis on blow count data is confirmed by expert testimony. A00794 (Mr. Hartley: "Typically, contractors would look at the blow counts as a more accurate method in my experience."); A01221 ("[T]he primary thing that I look at are the results of [blow count data]."). Similarly, this Court has stated that "[the results of sieve tests along with blow count data] typically provide a better estimate of the permeability than that provided by looking only at the soil type." *Randa/Madison Joint Venture III v. Dahlberg*, 239 F.3d 1264, 1267 (Fed. Cir. 2001). Even the Corps' own expert agreed that blow count data "would take precedence over descriptors." A17006.

Finally, CCI reasonably interpreted the USAID Report, which contained general information about the Umm Qasr Port, not specific information about the subsurface conditions at the Project site. A00302-09. Mr. Nottingham's conclusion from the USAID Report that shoaling would not cause problems at the Project site was later corroborated by ERDC's first report to the Corps in January 2009. A12410 ("[S]hoaling should not be a problem."). Additionally, the Corps' expert's analysis supports the reasonableness of Mr. Nottingham's interpretation. A16961; A16969-72. Yet, after initially acknowledging the consistency between Mr. Nottingham's and ERDC's analyses, the Board disregarded this point in its legal analysis and simplistically characterized the USAID Report's reference to

shoaling as evidence that CCI's interpretation was unreasonable. A00054. As demonstrated by the conclusions of both Mr. Nottingham and ERDC, however, a proper analysis shows that CCI's interpretation of the USAID Report was reasonable.

3. The Board Misapplied the Law in Holding that No Reasonable Contractor Could Rely Exclusively on the RFP's Indications of Site Conditions

In addition to misapplying the law by holding that CCI's interpretation of the RFP was unreasonable, the Board also erred by holding that CCI's reliance on the site conditions indicated in the RFP was unreasonable. Where the Government has provided boring logs, bidders have what this Court has termed, "right to rely" on data contained within those logs. *Foster*, 435 F.2d at 888 ("[B]idders had the right to rely on the indications of the subsurface in logs put in the contract for their use and reliance."). "Particular protection is given by the courts to the right of bidders to rely upon drill hole data in the contract, recognized to be the 'most reliable and the most specific indicator' of subsurface conditions." *Id.* (quotation marks omitted). Reliance on boring logs is unreasonable "only where relatively simple inquiries might have revealed contrary conditions." *Id.* Even unequivocal contract language through which the Government tries to disclaim responsibility for boring log data "does not lessen the right of reliance." *Id.*

In this case, the Corps provided bidders with boring logs representing subsurface conditions at the Project site, and then specifically instructed bidders to rely on the boring logs as representative of the Project site. Inexplicably, however, the Board held that, as a matter of law, no reasonable contractor would place “[a]ny absolute reliance” on these boring logs because the RFP charged bidders with conducting their own site investigation separate from and in addition to the site visit hosted by the Corps. A00049. The Board erred in several respects in drawing this conclusion.

Case law is clear that, while bidders are obligated to reasonably investigate site conditions prior to submitting a proposal, participating in a site visit hosted by the Government is sufficient to carry out this obligation. *Ace Constructors, Inc.* 70 Fed. Cl. at 269 n.13; 271 n.18. This would be all the more true here, where the site was in an active war zone with restricted access. Moreover, by attending this site visit, bidders are not required to bring along additional geotechnical experts for assistance. *E. Arthur Higgins*, AGBCA No. 76-128, 79-2 BCA ¶ 14050. Finally, bidders are not expected to perform their own geotechnical tests where the Government has already furnished the results of such tests for bidders to use in preparing their proposals. *Compare Travelers*, 75 Fed. Cl. at 721-22 (determining contractor was reasonable in preparing its bid by relying on test pit and borehole data provided by the Corps) *with Stuyvesant Dredging Co. v. United States*, 834

F.2d 1576, 1581 (1987) (concluding that reliance on subsurface density readings was unreasonable where bidding materials disavowed the reliability of these readings and stated that bidders were to “after investigation decide for themselves the character of the materials”).

Here, CCI met its obligation by conducting a reasonable site investigation when its representatives took active part in the Government sponsored site visit. Nothing in the RFP required bidders to conduct additional site inspections. Unlike the bid documents in *Stuyvesant Dredging Co.* that disavowed reliance on subsurface density readings, here the Corps specifically instructed offerors to rely on the subsurface conditions in the Andrea Engineering Report as “representative of the entire [Project] site.” *See supra* § IV.B.1. What is more, the Corps issued this instruction after the site visit in response to Questions 11 and 42, thus eliminating any remaining doubts offerors may have had about the reliability of the Andrea Engineering Report or anticipated soil conditions. *See, e.g.*, A01214-15 (testimony from Mr. Lyman, who noted that “the answer to [Question 42] helped a lot” by resolving any “ambiguity” about the extent to which the boring logs could be relied upon as representative of site conditions).

The Board compounded its legal error by nevertheless relying on inapplicable Contract provisions to conclude that CCI had an obligation to perform an additional pre-bid inspection. A00003-04 (*citing* A03382; A03454-55). These

Contract provisions relate only to post-award work on the Project, and are wholly inapplicable to evaluating what CCI's obligations were in bidding on the RFP. *Cf. Travelers*, 75 Fed. Cl. at 720 (noting that a contractor's post-award actions are irrelevant to determining reasonableness of pre-award reliance). These contractual provisions obligated CCI, as the awardee—not as a bidder—to prepare a geotechnical report confirming details of its overall design plan for the Project. A03382; A03454-55. They did not relate to or require investigation or retroactive confirmation of the conditions necessary to support land-side construction.

More importantly, these provisions related to work that would only come after CCI was required to make its bid in response to the RFP, and after the Corps accepted that bid, thereby binding CCI. *Id.* The Board nevertheless erroneously applied these post-award contract provisions to the pre-award process to determine whether CCI had established entitlement. This was an obvious error of law. The only relevance of CCI's post-award compliance with its contractual obligations pertains to the question of whether CCI reasonably mitigated its damages—it does not pertain to the question of entitlement to a Type I differing site conditions claim.

Furthermore, the whole point of providing bidders with boring logs indicating the nature of subsurface conditions is to encourage reliance: “Reliance is affirmatively desired by the Government, for if bidders feel they cannot rely, they will revert to the practice of increasing their bids.” *Foster*, 435 F.2d at 887

(emphasis added). Specifically, the expensive practices that courts have sought to avoid are bidders drilling their own borings or inflating the cost of their bid to account for construction risks. *Id.*

Even so, CCI did not, as the Board characterized it, place “absolute” reliance on the Andrea or USAID Reports. To the contrary, CCI attended the site investigation hosted by the Corps and affirmatively sought clarification regarding the scope of the boring log data by submitting Questions 11 and 42. A00312-13. By asking these questions, CCI fulfilled its responsibility to make “relatively simple inquiries” regarding the accuracy and reliability of the boring log data. *Foster*, 435 F.2d at 888.

In response to these questions, the Corps specifically directed bidders to assume that the Andrea Engineering Report and boring logs were representative of the entire Project site. A04833; A04838. CCI made these assumptions, as directed. A00312-15. Thus, this case is very different from *P.J. Maffei Bldg. Wrecking Corp.*, where the Government designated structural drawings as “for information only,” and then later amended this designation to specifically emphasize that bidders should not rely on the drawings. 732 F.2d at 918 n.7. Here, the Corps did the opposite—it initially designated the Andrea Engineering Report as “for information only,” but then later amended the RFP to encourage reliance. *Cf. Travelers*, 75 Fed. Cl. at 715 (“[I]f the government truly intended to

disavow the representations made in Appendix A, it could have done so more explicitly, as it did in *P.J. Maffei Bldg.*”). This step was also not surprising, as the Government wanted to proceed quickly through proposal evaluation and award, and did not facilitate any pre-bid inspections other than the aforementioned 90-minute site inspection, which took place at high tide. A00303-04 (Mr. Nottingham: “I think in terms of this project, [the Corps] kind of threw together what they had and tried to get the job done.”).

What is more, the Corps approved CCI's means and methods to construct a land-side OPEN CELL system three separate times: (1) when it awarded the Contract, A03351-464; (2) following the 35% design review meeting, A02075; A02077-78; A12400; and (3) following the 99% design review meeting. A12405-24. The Corps' repeated approval of CCI's construction plans further demonstrates that CCI's reliance on the RFP's indications of site conditions was reasonable. *United States v. Atlantic Dredging Co.*, 253 U.S. 1, 10-11 (1920) (noting that Government's acceptance constituted "assurance to the company of the truth of the [indicated site conditions] . . . and a justification of reliance upon"). Thus, it is impossible to see how CCI's decision to rely on the indicated site conditions could be regarded as unreasonable when it was made at the express direction of the Corps, which itself then repeatedly approved CCI's construction means and methods.

Nevertheless, the Board penalized CCI for not conducting a site visit (in *addition* to the one attended by Mr. Abbas), denied CCI its legal right to rely on the boring logs, and contravened the purpose of the Differing Site Conditions clause. This is precisely what this Court has previously cautioned against:

The decision of the Board is now seen as one charging plaintiff with notice of an effect on contract logs as a geological condition not discoverable on a visual inspection of the site. As such, it is erroneous as a matter of law, for it improperly enhances the duty of site investigation at the expense of the changed conditions clause and its underlying policies.

...

The changed conditions clause makes it clear that bidders are to compute their bids, not upon the basis of their own preaward surveys or investigations, but upon the basis of what is indicated and shown in the specifications and on the drawings.

Foster, 435 F.2d at 886-87 (emphasis added). Penalizing a bidder for not conducting an *additional* site visit is especially unreasonable in this case given that the Project site was located in an active war zone where kidnapping and attack posed a significant threat and all travel activities required special permits and armored transport. *See supra* § IV.D. In sum:

By choosing to include a description of the subsurface site conditions without qualifying the indications as unreliable, the Corps assumed the risk of the conditions being different than those indicated. If the Corps is permitted to include unqualified indications of the subsurface conditions, and still not be held responsible if the conditions turn out to be different than those indications, the differing site condition clause would serve no purpose.

Travelers, 75 Fed. Cl. at 722. The “particular protection” afforded to bidders in relying on boring logs is alone sufficient to overturn the Board’s finding on this element. *Foster*, 435 F.2d at 888. This point is only highlighted further upon consideration of the other facts, such as CCI’s attendance at the limited site investigation permitted by Corps; CCI’s inquiries to the Corps about soil data; the Corps’ instruction that bidders should rely on the Andrea Engineering Report and boring logs for all soil conditions; and the Corps’ own approval of CCI’s construction means and methods. Reviewing reliance *de novo*, this Court should conclude that CCI acted as a reasonable and prudent contractor in relying on the RFP’s indications of site conditions.

B. Element Four: CCI Encountered Materially Different Subsurface Conditions at the Project Site

To establish the fourth element of a differing site conditions claim, a contractor must demonstrate that the actual conditions it encountered at the Project site differed materially from the conditions indicated in the RFP. The most common evidence demonstrating materiality is an increased economic impact on the contractor arising from performing more work than was expected or being forced to implement alternative construction plans. *McCormick Const. Comp., Inc. v. United States*, 18 Cl. Ct. 259, 263 (1989), *aff’d*, 907 F.2d 159 (Fed. Cir. 1990).

At the hearing, CCI presented substantial evidence establishing not only that it encountered drastically different soil characteristics than those indicated in the

Andrea Engineering Report, but also that it was forced to incur tens of millions of dollars in extra, unanticipated costs resulting from a complete change to its planned means and methods. The Board, however, ignored all such uncontroverted evidence and simply concluded without analysis that the differences encountered by CCI at the Project site were immaterial. A00051-52. This conclusion by the Board was a legal error that requires reversal.

1. Standard of Review

In this case, the fourth element of the differing site conditions test presents question of law that should be reviewed *de novo*. Although the question of what conditions the contractor actually encountered at the project site is undoubtedly rooted in fact, *Weeks*, 13 Cl. Ct. at 228, the starting point for analyzing this element necessarily depends on what conditions the contractor could have expected from a reasonable interpretation of the contract documents, which as described above, is a question of law. *T.F. Scholes v. United States*, 357 F.2d 963, 968 (Ct. Cl. 1966) (explaining that “in order to determine whether the subsurface or latent physical conditions at the site of the work differed materially from those indicated in the contract, the administrative agency is deciding a question of law”); *Travelers*, 75 Fed. Cl. at 703 (referring to “material variation between expected and encountered conditions” (emphasis added)).

In other words, since the materiality element measures the difference between: (1) the conditions expected from a reasonable interpretation of the contract; and (2) the actual conditions encountered, this element should be reviewed *de novo* where the lower court erroneously concluded that the contractor's interpretation was unreasonable. This is the only logical review that could be conducted where the starting point of the analysis is itself incorrect, and based on an error of law. *See* A00052 (basing materiality analysis on incorrect determination of what was reasonably indicated in the RFP).

2. The Board Misapplied the Law in Holding that the Site Conditions Encountered by CCI Were Not Materially Different from those Indicated by the RFP

The Board's determination with respect to materiality must be reversed because it is inextricably tied to the Board's erroneous determination that CCI's interpretation of the RFP was unreasonable. *T.F. Scholes*, 357 F.2d 968 (materiality element "turns on the proper interpretation of the contract"). That is, the starting point for the Board's analysis of the materiality element was its assumption that CCI's interpretation of the RFP was unreasonable, so if it was wrong on this point, then it was necessarily wrong in its materiality analysis. The inextricability of the Board's findings as to the second and fourth elements explains why the materiality section of its decision comprises only two sentences, one of which simply lists "post-award conditions," and the other of which

perfunctorily concludes that the conditions encountered by CCI were not materially different. A00051-52.

If the Board had correctly acknowledged that CCI's interpretation of the RFP was reasonable, it would have properly considered that the differences between the RFP's indications of site conditions and the actual conditions encountered by CCI were material. For support, the Board would have needed to look no further than the testimony of the Corps' own expert who acknowledged that the data from the Andrea Engineering Report should not have been used as representative of Project site conditions. A16858.

There is also no shortage of further evidence establishing that the actual site conditions were materially different than those represented in the RFP. First, the difference in conditions was so severe that CCI was forced to completely alter its means and methods of construction, which resulted in additional costs that were so high as to nearly exceed the Contract price itself. A13169-72. Second, the Corps acknowledged its responsibility for these conditions through issuing a change order affirming Lt. Gutierrez's observation that CCI had encountered materially different site conditions at the Project site. A03493-95; A012649; *see also Foster*, 435 F.2d at 892-93 (change orders are evidence of materiality). Third, CCI's experts agreed that the Andrea Engineering Report indicated soils at the Project site would be significantly stronger than proved to be true. A00989 (Mr. Hoque: "Q . . . did the

Andrea [Engineering] Report accurately represent the field conditions . . . ? A I'm afraid to say no. They did not"); A13947-49 (same conclusion from Mr. Hartley).

Thus, starting from the correct premise that CCI's interpretation of the RFP was reasonable, and then considering not only the Corps' own admissions of materiality, but also the drastic differences in soil composition, cost of completion, and construction, it is clear that CCI encountered materially different conditions.

C. Element Five: The Materially Different Subsurface Conditions that CCI Encountered Were Reasonably Unforeseeable

To establish the fifth and final element of the differing site conditions test relied on by the Board to deny CCI's claim, a contractor must demonstrate that the actual conditions it encountered were reasonably unforeseeable based on the information available to the contractor at the time of bid submission. *Travelers*, 75 Fed. Cl. at 703. In other words, the question is: "Did the plaintiff anticipate or have the right to anticipate that the underground conditions would be otherwise?" *United Contractors*, 368 F.2d at 595.

Unlike the second element of the differing site conditions test, which focuses solely on the information included in the RFP, the fifth element takes into account all other information that was reasonably available to the contractor, such as what could have been learned from a site visit. *Weeks*, 13 Cl. Ct. at 236 (noting that foreseeability element depends "to a large extent" on reasonableness of pre-award

site visit). Reasonably available information, however, does not include what could have been learned from an independent investigation separate from the site visit. *Pleasant Excavating*, 229 Ct. Cl. at 656 (“[Contractors] are not expected to conduct their own expensive tests.”). Moreover, “the duty to make an inspection of the site does not . . . put[] the contractor at peril to discover hidden subsurface conditions or those beyond the limits of an inspection appropriate to the time available.” *Foster*, 435 F.2d at 888.

Here, despite clearly established precedent holding that contractors are not required to conduct a site investigation beyond attending the site visit, the Board misapplied the law by charging CCI with the knowledge it would have learned from an independent geotechnical survey and erroneously concluded that the actual site conditions were not reasonably unforeseeable. The Board also misapplied the law in evaluating this element because its analysis was premised on its inaccurate conclusion that CCI’s interpretation of the RFP was unreasonable. *See* A00052 (analyzing foreseeability based on erroneous interpretation of the RFP).

1. Standard of Review

In this case, whether the materially differing site conditions encountered by CCI at the Project site were reasonably unforeseeable is reviewed *de novo* because the Board misinterpreted the RFP as obligating CCI to conduct independent geotechnical tests prior to submitting its bid and, in doing so, denied CCI its legal

right to rely on the boring logs furnished by the Corps. *Foster*, 435 F.2d at 886-88 (concluding that Board erred “as a matter of law” by denying contractor its right to rely on boring logs); *see also Weeks*, 13 Cl. Ct. at 237 n.317 (addressing foreseeability element “as a question of law . . . [about] the reasonableness of the plaintiff’s conduct”). Put differently, since the Board’s foreseeability determination is premised on what CCI could have learned by conducting geotechnical tests it was not legally obligated to perform, the Board erred as a matter of law and its decision on this point should be reviewed *de novo*.

2. The Board Misapplied the Law in Holding that the Actual Conditions Encountered by CCI at the Project Site Were Not Reasonably Unforeseeable

The Board’s determination regarding the fifth element of the differing site conditions test was flawed. As demonstrated above, CCI reasonably interpreted and relied on the RFP in concluding that the site conditions, as indicated by the Corps, were suitable for building the OPEN CELL system from the land. *See supra* § VI.A. Consistent with this conclusion, the actual conditions encountered by CCI at the Project site were not reasonably foreseeable from the contents of the RFP materials. *Travelers*, 75 Fed. Cl. at 720 (noting that foreseeability inquiry is part of deciding whether contractor was reasonable in interpreting and relying on RFP).

Accordingly, the only question is whether any other reasonably available information about the Project site, beyond the RFP materials, would have alerted CCI when it was placing its bid that the actual subsurface conditions were materially different from what was represented in the Andrea Engineering and USAID Reports. On this point, the Board charged CCI with the knowledge it would have gained from conducting its own geotechnical analysis of subsurface conditions separate from and in addition to attending the site visit and relying on its reasonable interpretation of the Andrea Engineering and USAID Reports. A00052. Yet as discussed above, CCI carried out its obligation to reasonably investigate the site by participating in the Government sponsored site visit and it had a legal right to rely on the Andrea Engineering and USAID Reports.

Further, CCI, like every other offeror, was effectively foreclosed from conducting its own analysis resulting from the site's restricted access and location in an active war zone. For this reason, CCI cannot be held accountable for knowledge it might have acquired through its "own preaward surveys or investigations"—it can only be charged with knowledge of "what is indicated and shown in the specifications and on the drawings." *See Foster*, 435 F.2d at 887 (quotation marks omitted).

This case is unlike *Randa/Madison Joint Venture III*, where a contractor failed to establish reasonable unforeseeability because it did not heed the RFP's

instruction that soil test results were available for in-person inspection at the Corps' local branch office. 239 F.3d at 1271-72. Given this instruction, the contractor was held accountable for the knowledge it would have acquired from the soil test results, which would have alerted the contractor of materially different site conditions. *Id.* By contrast, CCI dutifully apprised itself of all reasonably available information about subsurface conditions at the Project site, not only by reasonably interpreting the RFP, but also by attending the site visit and recording its observations and asking follow-up questions about the RFP's indications of subsurface conditions.

Moreover, the Board was wrong about the adequacy of CCI's site investigation. Even setting aside the difficulties of inspections in a war zone, and the attendant safety risks and security requirements, if CCI had sent engineers from CCI, PCI, or PND, they would not have been able to observe anything more than Mr. Abbas. The relevant portions of the site were submerged in water during a 90-minute inspection that the Corps set up to take place behind a fence at the site. *AAAA Enterprises, Inc.*, ASBCA No. 28172, 86-1 BCA ¶ 18628, *aff'd*, 824 F.2d 978 (Fed. Cir. 1987) (rejecting Government's attempt to fault contractor for failing to perform site investigation where site conditions were obscured from view by windblown sand). Based on the above, it was reasonably unforeseeable to CCI that

the actual site conditions would prevent it from proceeding with its plans for land-side construction.

D. CCI Actually Relied on the Andrea Engineering and USAID Reports in Choosing its Means and Methods of Construction When Preparing Its Proposal

In addition to misapplying the law regarding claims for differing site conditions, the Board issued a finding of fact that is not supported by substantial evidence when it found that CCI did not actually rely on the Andrea Engineering and USAID Reports when preparing its proposal. A00049-51.

1. Standard of Review

Whether a contractor actually relied on indications of site conditions is a question of fact. *See P.J. Maffei*, 732 F.2d at 917 n.6. Accordingly, the Board’s finding that CCI did not establish actual reliance is reviewed for substantial evidence. 41 U.S.C. § 7107(b)(2). “Substantial evidence means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” *E.L. Hamm & Assocs., Inc. v. England*, 379 F.3d 1334, 1338 (Fed. Cir. 2004). “The substantiality of evidence must take into account whatever in the record fairly detracts from its weight.” *Woodcrest Const. Co. v. United States*, 408 F.2d 406, 409 (Ct. Cl. 1969) (quotation marks omitted).

2. The Board’s Finding that CCI Did Not Rely on the Andrea Engineering and USAID Reports Is Not Supported by Substantial Evidence

A contractor seeking to establish the reasonableness of its pre-award conduct must demonstrate that it actually relied on the indications of site conditions contained in the RFP. *Control, Inc. v. United States*, 294 F.3d 1357, 1363-64 (Fed. Cir. 2002). But a contractor’s post-award conduct is irrelevant to this inquiry. *Travelers*, 75 Fed. Cl. at 720 (emphasizing that “course of performance reliance” is immaterial). Here, despite Corps representative Major Himes’s testimony that “the contractor clearly relied upon what was in the Andrea [Engineering] Report,” A01865, the Board erroneously found that CCI had not established actual reliance. A00049-50.

As the Board acknowledged, Mr. Nottingham testified that he and the CCI team relied on the Andrea Engineering Report’s indications of site conditions as well as the Corps’ answers to Questions 11 and 42 in preparing its proposal and choosing to construct the OPEN CELL system from the land. A00013. Mr. Nottingham’s testimony establishing actual reliance could not have been clearer:

Q Did you look at the data associated with all three borings when you reviewed and relied upon the Andrea [Engineering] Report to help prepare a proposal to the government in this case?

A Yes.

A00323 (emphasis added); *see also* A00400 (“[W]e had to rely on [the Andrea Engineering Report data].”); A00312-13 (testifying that CCI relied on Corps’ Answer to Question 11); A00314-15 (testifying that CCI relied on Answer to Question 42 and that “we did rely on [the boring logs]”); A00340 (testifying that he prepared proposal with the expectation that the OPEN CELL system would be installed “from land construction”). Finally, Mr. Nottingham’s testimony also demonstrates that he reviewed and relied upon the USAID Report’s representations regarding the risks of shoaling in the river. A00307-09.

Contrary to virtually all record evidence, the Board inexplicably found that “there is no persuasive evidence that CCI relied upon [the Andrea Engineering report] or the USAID report in preparing its proposal.” A00049. This finding is not supported by substantial evidence because at each step of its analysis, the Board’s reasoning was either directly contrary to the record, or irrelevant and inadequate to reasonably conclude that CCI did not rely on the indications of site conditions contained in the RFP. *See E.L. Hamm*, F.3d at 1338 (“Substantial evidence means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” (emphasis added)).

First, the Board's statement that none of CCI's questions to the Corps were related to geotechnical conditions is contradicted by the plain language of Questions 11 and 42, which inquire about soil investigation and the applicability of

boring log data. A04833; A04838. Even if it were true, as the Board concluded, that Question 42 was most attributable to Weston Solutions, Inc. and not CCI,⁷ A00050, this would not change the fact that CCI relied on the Corps' answer to this question. As the Board itself noted, "even though I asked a question earlier as to who asked the question, I don't find it particularly material." A01354.

Second, Mr. Nottingham's testimony about the questions regarding the boring logs and his efforts to acquire more information from the Corps supports, rather than undermines, the conclusion that CCI relied on the indicated site conditions. After reading the Andrea Engineering Report, Mr. Nottingham questioned whether it provided enough information to determine the soil characteristics of all locations throughout the entire Project site. As a result, he sought and obtained more information through Questions 11 and 42, and as directed, relied on the Corps' answers to these questions. A00312-14; A04833; A04838. Thus, Mr. Nottingham's initial questions about the sufficiency of soil data have no bearing on whether CCI relied on the data once the Corps directed it to do so.

Third, the Board ignored substantial evidence when it inferred that Mr. Nottingham's remarks about "inconsistencies" between the verbal descriptors and the blow count data meant that he did not rely on the boring logs. A00050. As

⁷ This is directly contrary to the testimony of Mr. Nottingham that he in fact requested that this question be asked on behalf of the CCI team. A00313.

he testified in detail, Mr. Nottingham analyzed and resolved these inconsistencies by properly placing greater weight on blow count data, and then relying on that data. *See supra* § IV.C. The Board, however, completely ignored Mr. Nottingham's analysis and inferred without basis that the inconsistencies necessarily meant that he did not rely on the boring logs. A00050.

Fourth, the fact that there are differences between the data contained in Mr. Nottingham's concept plan and the data in Boring Log No. 2 does not demonstrate a lack of reliance on the Andrea Engineering Report. These documents depict different approximations of the depth at which sand and silt would be encountered. *Compare* A06365 (*see* top right corner) *with* A04818. The Board interpreted this to mean that CCI did not rely on Boring Log No. 2. A00050. The Board was wrong to infer a lack of reliance from these differences because, as Mr. Nottingham testified, he relied much more heavily on the blow count data from Boring Log No. 2 than on verbal descriptors, which are the data from which the concept plan deviates.⁸ A00328-34. By contrast—and consistent

8 Again, verbal descriptors are not nearly as informative as blow counts, which are “more accurate” for determining the true character of subsurface soils. A00794. This distinction was especially important in this context given that the mere presence of “soft clays” does not preclude, and is indeed common, in the use of land-side construction. A00822 (Mr. Hartley: “We’ve constructed many projects from shore over soft clays in which the means and methods from a shore site construction were performed . . .”).

with Mr. Nottingham's reliance on the blow count data—the concept plan does not deviate from the blow count data contained in Boring Log No. 2. A06365.

Fifth, the Board’s observation that the cost estimate “did not discuss . . . construction” misses the point because, as Mr. Nottingham testified, this cost estimate specifically factored in the cost of land based construction. A00401-03 (explaining cost estimate at A06444-45). Further, the fact that the concept plan and cost estimate (one of which is a drawing) do not refer to the Andrea Engineering or USAID Reports by name does not show lack of reliance—particularly where, as here, Mr. Nottingham’s uncontroverted testimony is that he did review and rely upon them.

Sixth, it was unreasonable for the Board to infer that, because “CCI did not perform any geological testing of the site prior to contract award and recognized that it lacked soils data,” it must not have relied on the site conditions indicated in the RFP. A00050. If anything, this reinforces CCI’s argument with respect to reliance. Given that performing pre-award geotechnical testing in an active war zone under very tight bidding time constraints after having dutifully participated in the site visit was not an option for CCI (or, for that matter, any other bidder), it *had* to rely on the only geological information available—information that the Corps directed bidders to use as indicative of the entire Project site. A04833; A04838.

Similarly, it was unreasonable for the Board to infer that, because CCI had to make “significant assumptions” about site conditions, A05181, it must not have relied on the conditions indicated in the RFP. A00050. Evidence showing that CCI had to make assumptions about war zone site conditions does not demonstrate a lack of reliance on the indicated site conditions. Making assumptions about the Project site was exactly what the Corps instructed CCI to do. A04833; A04838. Thus, the fact that CCI had to make “significant assumptions” about the Project site adds to, rather than detracts from, the substantial evidence establishing reliance.

Seventh, CCI's statements attributing its crane pad failures to seepage from the dredge ponds do not, as the Board found, show a lack of reliance on the RFP. A00050. As an initial matter, all of these statements occurred post-award and thus are not relevant to determining whether CCI relied on the RFP materials in developing its pre-award proposal. *Travelers*, 75 Fed. Cl. at 720. Further, by positing that the dredge ponds caused the poor soil conditions, CCI was simply speculating as to the cause of the unstable soil conditions it had encountered at the Project site. Such speculation in no way means that CCI did not rely on the Andrea Engineering or USAID Reports. It only means that CCI was alarmed by the unstable soil characteristics it had encountered and was working to understand their geological cause. Thus, it defies logic to say that CCI should have identified

“misplaced reliance” as the literal cause of the conditions (especially considering that reliance could not have been “misplaced” after the Corps instructed bidders to rely on the Andrea Engineering Report). Moreover, what the Board describes as the “root cause” of the unstable subsurface conditions, A00050, is beside the point—all that matters is what resulted, which, as the Corps described it, was “unexpected instability at the 25m mark,” *i.e.*, materially different site conditions. A13371.

Finally, the Board misinterpreted the significance of Mr. Nunn’s testimony regarding constructability discussions during proposal planning meetings. Just before concluding that CCI had not established actual reliance, the Board cited the following excerpt:

Q When your planning meet[ing]s were occurring, when constructability issues were discussed, they weren’t discussed in terms of what the Andrea [Engineering] Report indicated. Right?

A No. The Andrea [Engineering] Report was not the basis of any of our constructability, as you describe, discussions.

A00480. Taken in isolation this excerpt makes it sound as though CCI did not consider the Andrea Engineering Report when deciding whether to construct the OPEN CELL system from the land. When this testimony is placed in the context of all other uncontroverted evidence, however, Mr. Nunn’s testimony addresses a point in the process after which Mr. Nottingham had already reviewed the Andrea Engineering Report and determined that the subsurface soil conditions would

support a land based approach. When viewed in its full and accurate context, this excerpt of Mr. Nunn's testimony in no way establishes that CCI neither reviewed nor relied upon the RFP in formulating its proposal.

First of all, this excerpt is from a series of questions to Mr. Nunn about Mr. Pelant's role on the Project—thus, by “planning meetings,” the Government appears to have been referring specifically to meetings that Mr. Nunn had with Mr. Pelant, his partner at PCI, not all team-wide proposal meetings in general. A00479-80. Furthermore, Mr. Burke separately testified that he attended an initial planning meeting with PCI at PND's offices where Mr. Nottingham gave a presentation in which he specified that the OPEN CELL system would be “constructed from onshore[.]” A00127. Thus, notwithstanding the Board's mischaracterization of Mr. Nunn's testimony, constructability was in fact discussed at the outset of CCI's planning meetings.

Even so, team-wide “planning meet[ing]s” were not where CCI devised the details of its construction plans—these plans were the responsibility of Mr. Nottingham, the OPEN CELL patent holder, whom Mr. Nunn and the rest of the CCI team trusted to identify any hindrance that would make land-side construction unfeasible. A00421-22. As Mr. Nottingham testified, the estimate he prepared and provided to the CCI team was an engineer's cost estimate calculated based on land-side construction. A00401-03. Moreover, Mr. Nottingham's

unequivocal testimony was that, as instructed by the Corps, he relied on the Andrea Engineering Report, the boring logs, the Corps' answers to Questions 11 and 42, and the USAID report in helping CCI prepare its bid proposal. A00302-09; A00312-15; A00328-34.

Additional testimony from Mr. Nunn also puts his remarks in context:

Q [D]uring the evolution of the proposal, do you recall discussing whether the project would proceed from a marine side or a land side?

A During the proposal, we had no consideration except for the land side. I mean, that is what the patent provides in the way of a major advantage, and we saw nothing that would be contrary to that.

A00421. Thus, the Board's strained extrapolation, out of context, of Mr. Nunn's testimony is wholly unsupported by the entire hearing record.

CCI had a legal right to rely on the data supplied by the Government as part of the RFP process in submitting its bid, and there is ample evidence that it did so. For the above reasons, the Board's contrary finding that CCI did not rely on the Andrea Engineering Report is not supported by substantial evidence and should be reversed.

E. CCI's Damages Were Solely Attributable to the Materially Different Subsurface Conditions, but CCI Does Not Address This Issue at Length Because the Board Did Not Reach Quantum

CCI does not address the Board's analysis on the causation element because the Board did "not reach quantum" and only included this analysis "*arguendo*."

A00054 (emphasis in original). Even so, the Board did not hold that CCI failed to establish causation with respect to all of its costs—rather, the Board held that CCI had not established that “its claimed costs were all attributable to [differing site conditions].” *Id.* (emphasis added). Thus, the Board acknowledged that CCI had established causation with respect to at least some portion of its additional costs.

Furthermore, CCI presented extensive testimony and documentation explaining in detail how the differing conditions it encountered at the Project site caused it to incur damages. A01356-1426 (testimony of expert Jordan Rosenfeld); A14485-578 (expert damages report); A14821-14830 (rebuttal damages report); A01099-117 (testimony demonstrating causation). By contrast, at no point did the Corps’ rebuttal witness, Dan Westhoff, ever opine that CCI’s claimed damages were not attributable to differing site conditions. *See* A02605-732. Thus, upon remand, CCI is confident the record will amply support a finding that its damages were solely attributable to the differing site conditions encountered at the Project site.

VII. CONCLUSION

For these reasons, CCI respectfully requests that the Court reverse the Board’s decision in ASBCA No. 57316, hold that CCI has established entitlement to compensation for the Type I differing site conditions it encountered at the Project site, and remand this case to the Board for a determination of quantum.

Respectfully submitted this 14th day of August, 2014.

/s/ Lisa M. Marchese

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ADDENDUM
(ASBCA No. 57316)



ARMED SERVICES BOARD OF CONTRACT APPEALS

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Re: ASBCA No. 57316
Appeal of CCI, Inc.
Under Contract No. W917BK-08-C-0059

Dear Counsel:

Enclosed is one authenticated copy of the Board's decision.

Very truly yours,

A handwritten signature in black ink, appearing to read "J. D. Gardin", is written over the "Very truly yours," text.

JEFFREY D. GARDIN
Recorder

Enclosure

ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeal of --)
)
CCI, Inc.) ASBCA No. 57316
)
Under Contract No. W917BK-08-C-0059)

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Winchester, VA

OPINION BY ADMINISTRATIVE JUDGE SCOTT

CCI, Inc. appealed under the Contract Disputes Act (CDA), 41 U.S.C. §§ 7101-7109, from the contracting officer's (CO's) denial of its differing site conditions claim, then in the amount of \$35,125,036, under its contract with the U.S. Army Corps of Engineers (Corps), Gulf Region South District (GRS), for a pier and seawall project in Iraq. The Board held a 15-day hearing, in Anchorage, Alaska, and Falls Church, Virginia. We heard entitlement and quantum but because we deny the appeal we do not decide quantum and therefore do not make quantum findings.

FINDINGS OF FACT

1. On 25 April 2008 GRS issued a request for proposals (RFP) for a negotiated design/build contract under the Foreign Military Sales (FMS) program. The Iraqi Navy was the FMS customer. The RFP sought seawall design and construction; a design to minimize dredging; and construction of an "L-shaped" pier ("Pier 1"), with an option for a "T-shaped" pier ("Pier 2") (north of an existing Pier 3) at Umm Qasr, Iraq. The contractor was responsible for project design and was to submit required design documentation at 35%, 99%, and 100% phases. (R4, tab 103 at 1 of 87, at Scope of Work (SOW) at 96-97, 101-03 of 113, tab 103 at 5 of 89; tr. 8/80)

3. The RFP included the FAR 52.236-2, DIFFERING SITE CONDITIONS (APR 1984) clause, which states, concerning a "Type I" differing site condition, at issue:

(b) The [CO] shall investigate the site conditions promptly after receiving the notice. If [they] do materially so differ and cause an increase...in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, an equitable adjustment shall be made....

5. The RFP stated that the "Contractor/Designer shall research all existing conditions" at the naval base and waterway (R4, tab 103, SOW at 96 of 113).

6. RFP § 4.1, “**GEOTECHNICAL**,” provided:

4.1.1 Site Specific Information

2

distribution; liquid and plastic limits; shear tests, including unconfirmed and triaxial compression and direct shear; and consolidation compressibility; plus various chemical analyses on soil. (AR at 1-12 and appendices)

8. The AR stated at § IV, "DESCRIPTION OF SUBSOIL STRATA":

The subsoil strata consist mainly of a very soft, soft to medium gray to dark gray sandy silty clay layer with black traces of organic matter and white shiny traces of soluble salts, overlying medium, dense to very dense layer of gray fine, medium to coarse grained silty sand, with little gravel.

The water table was encountered, as observed at the time of investigation between (0.0-1.0), below the existing ground level (NGL), at [BH] nos 2 & 3, which were in the ebb and tide zone. While at [BH] no. (1), which was the more distance from the sea, was between (1.0-1.5)m....

The fluctuation of water table with the seasons could be observed (rising during spring). The zone immediately above water table is greatly affected as far as strength and compressibility are concerned. As moisture increased the strength decreased and compressibility increased.

(AR at 4) (Emphasis added)

9. The AR stated at § VI, "DISCUSSION OF RESULTS":

The site subsoil consists mainly from two layers, the first layer of very soft, soft to medium gray sandy silty clay with amount of soluble salts and organic matter overlying on a layer of medium, dense to very dense gray silty sand.... [T]he majority of the first top soil is classified as...silt-sand-clay mixtures.

The water table was encountered...between (0.0-1.0) meter below the existing ground level.... Furthermore, the site was within the ebb and tide zone of the sea.

The saturated soil condition below the water table makes the problem of settlement significant as consolidation is

Mike Hartley (below), describes values less than 25 kPa as “Very soft” and from 25 to 50 kPa as “Soft” (R4, tab 2 at 15, tab 97 at 13).

10. The AR contained three BH logs. BH No. 1 was inland from where the crane pad at issue was to be constructed and the parties have discounted it. BH No. 2 was very near the pad site. (AR, app’x A, app’x B at 1, 2; exs. A-234 at 6, G-24; tr. 2/168-69, 6/33) Its log described the top 7m of material as “[v]ery soft to soft gray to dark gray silty CLAY with black spots and/or pocket of organic matter and shiny traces of soluble salts”; from 7 to 12.5m as “[s]oft to medium gray silty CLAY with some silty sand pocket & shiny spots of soluble salts”; and from 12.5 to 18m as “[d]ense to very dense gray coarse grained clayey silty SAND with some coarse gravel & cobbles” (AR, app’x B at 2) (emphasis added).

11. The BH No. 3 log described the upper 7m as “[v]ery soft to soft gray to dark gray silty CLAY with rusty brown pocket of fine sand & black traces of organic matter & shiny spots of soluble salts”; from 7 to 16.5m as “[s]oft dark gray silty CLAY with white shiny traces of soluble salts & yellowish brown line of fine sand”; from 16.5 to 17.5m as “[v]ery dense coarse grained gravelly SAND with some cobbles and boulders”; and from 17.5 to 24m as “[l]oose to medium gray to dark gray medium grained silty SAND with shiny traces of soluble salts” (AR, app’x B at 3) (emphasis added).

12. The RFP noted the site was on an estuarine outflow of the Tigris-Euphrates delta system, with current flow predominantly tidal and maximum velocities near four knots during spring tide ebb flow. It addressed sedimentation:

The closest waterfront development to this site is the commercial port of Umm Qasr located immediately “upstream”. The infrastructure is based upon a continuous dredged quay along the west bank of Khawar Abd Allah....

Satellite photos substantiate local reports that Khawr Abd Allah is *heavily laden with fine sediments*. Although actual situation [sic] rates experienced within the commercial port are not known,...*the marine railway located between the commercial port and the proposed Navy Base is reported to have already silted in.* [Emphasis added]

(R4, tab 105 at 1, *see* tab 106; tr. 2/29-30, 120) The project was largely in an intertidal zone, between low tide and high tide, with some of it beyond the low tide line (tr. 6/29).

13. Iraqi contractor Sada Al-Raneen (SAR) brought the RFP to PolyEarth Construction International, LLC (PCI), for which SAR had been a subcontractor in 2005

on a Basra airport project with which Lee Nunn was involved. Mr. Nunn and Samuel Pelant had formed PCI. Mr. Pelant, a project manager, was not an engineer. Mr. Nunn was a registered civil and nuclear engineer. He was with the Corps for 23 years prior to retiring. He had many major engineering jobs at the Corps and in the private sector. His work had included several projects in the Middle East. (Ex. G-26, part 1 at 39, part 2 at 184; tr. 2/138-151, 212; see R4, tab 111 at 4)

14. Mr. Nunn consulted with Dennis Nottingham, then a principal in Peratrovich Nottingham, a marine engineering firm also known as PND Engineers (PND), and gave him the RFP. Prior to his retirement in August 2009, Mr. Nottingham, who held a masters degree, apparently in the geotechnical area, had 50 years' experience as a professional engineer. He held a patent on an "open cell" process that was attractive to Mr. Nunn for pier construction. (Tr. 2/6-8, 77, 104-05, 151-52)

15. Mr. Nottingham confirmed that the project was immediately downstream of the old port but asserted that, due to dredging, the old port was trapping all sediment. If any remained, a gentle curve in the river formed an outside bend, causing scouring that would sweep it away from the project. (Ex. G-2; tr. 2/119-20, 127-31) He interpreted a United States Agency for International Development (USAID) report included in the RFP (below) to mean that sediment deposits were on the inside bends (ex. G-2; tr. 2/41-42, 119-20, 127-31). That is where he “expected the weak soils to be” (tr. 2/42). Mr. Nottingham’s scouring views are supported in part by Dr. Michael Briggs, a research hydraulic engineer at the Corps’ Engineer Research and Development Center (ERDC). He prepared a Navigation Design Review, dated 6 January 2009, post contract award, of a revised CCI submittal, noting that the new piers were on the outside of a slight concave bend in the river, so shoaling should not be a problem. Scour and erosion from riverine currents were more likely. He stated that the “bottom” should be considered “soft.” He did not do a geotechnical design review or analysis relative to soils. (Ex. A-15 at 174826)

16. CCI's proposal eliminated a dredging item to be priced on the ground that, by pushing the pier further into the channel, greater scouring would occur and the flow of water would keep sedimentation down (tr. 2/153, 8/64; *see also* R4, tab 112 at 3-4). However, Mr. Nunn knew that a dredging contractor was on site; that "[t]hey were spending millions of dollars dredging the naval port" and "the other piers were already clogged with siltation" (tr. 2/153).

17. In Mr. Nottingham's experience it is the contractor's choice how to proceed with open cell dock construction. It has been done with barges, including when very soft soils are present, and with combination marine and land-based operations. Most open cell projects with which he had been involved had been built from the land. If it is possible to get a good purchase and the ground is substantial enough to hold the equipment, a land-based approach is normally lower cost. According to Mr. Nunn, PCI considered

only land-based construction and saw nothing contrary to that approach. (Ex. G-27 at 11-12; tr. 2/25-27, 84-85, 154) He acknowledged that open cell work was often done from barges, but stated that, if it were possible to do it from the land, “the economics demand that” (tr. 2/155). Mr. Nottingham’s involvement with the geotechnical aspects of project design appears to have been limited. CCI did not request a ground investigation or hire a geotechnical professional to evaluate its landside crane pad construction efforts until after slope instability occurred (below).¹

18. Mr. Nunn consulted with Keith Burke, president of CCI, a subsidiary of Bristol Bay Native Corporation (BBNC), to see if CCI would be interested in the project. Mr. Burke, who was not an engineer, and Jim Hutton, eventually CCI’s project manager, attended a PND briefing, which demonstrated a land-based operation. CCI had very little experience in marine construction and had never been involved in an open cell project, but it wanted to expand its government contracting work and thought it would be an opportunity to get its “foot in the door...in the [Middle East]” (ex. G-27 at 8). At the proposal stage Mr. Burke did not receive a copy of the RFP. (R4, tab 112 at 5, 17; tr. 1/50-52, 54-57, 74, 77, 105-07; ex. G-18 at 41, G-27 at 7, 9; see R4, tab 111 at 4) CCI did not do an estimate; PCI and PND did the pricing (tr. 1/147).

19. PCI and PND were responsible for project design and engineering. PCI was to run it with PND and SAR as its subcontractors. (Ex. G-27 at 16-17; tr. 1/57)

20. The Corps received about 10 proposals. All but CCI proposed “L&T” piers called for in the RFP. At PCI’s request, the RFP was amended to allow for alternative concepts, such as open cell. (Tr. 8/30-31, 34, 43-44)

21. The site visit was on 17 May 2008. CCI, PCI and PND did not attend. A SAR engineer attended. SAR did not have nearshore marine construction experience. The on-site supervisor from Weston Solutions (Weston), which was performing other work at Umm Qsar, attended. Commander Raymond Deck, an engineer, conducted the visit by bus and walking. The tide was high. Low tide photos were in RFP Amendment No. 2, but the low tide areas were covered with water during the visit and attendees could not then have walked on them. The visit lasted about 90 minutes but there was no deadline; the attendees determined the time spent. They took photographs and posed written questions, which Commander Deck gave to the Corps so the questions and answers would be provided to all offerors. During the visit the contractors were told about the need to dredge an area between what was then perceived to be the L&T pier area and the shoreline, because there was so much silt vessels would not be able to moor. That day, SAR’s engineer reported to Mr. Pelant². He forwarded photos, questions he

¹ For efficiency, we often refer to “CCI,” even if other entities were involved.

² Unless otherwise noted, all cited communications were by email.

had posed and the answers. None of the questions pertained to geographic site conditions or CCI's planned method of dock construction. We have not been directed to any evidence that SAR evaluated ground conditions or the site's suitability for land-based construction. CCI did not attempt a site visit until after contract award. (R4, tab 104 at 3-4, 10, tab 151; ex. G-26, part 1 at 36-38, part 2 at 184-85, 190; tr. 2/155, 157, 229-30, 8/124-25, 129, 139-40, 143-45, 151, 168-70, 172-73, 181-85)

22. Prior to contract award Mr. Nottingham did most of the work on behalf of PND (tr. 2/97). He designed a one-page concept plan dated 8 May 2008 that was incorporated into CCI's proposal (R4, tab 112 following pg. 17, tab 150). CCI has not rebutted the Corps' assertion that the soil conditions and profile shown on his plan did not correspond to the AR data in the RFP (*see* R4, tab 103c, AR, app'x B-[BH] Logs, tab 150; gov't br. at 20, proposed finding (PF) 52, 229-31; gov't reply at 18). Mr. Nottingham also prepared a generic estimate, dated 21 May 2008, based upon a preliminary design, of the cost of building a similar open cell system, from the land, in the United States Gulf or South Coast region, because he had not previously worked in the Middle East (R4, tab 153 at 15868; tr. 2/50, 53, 73, 107-08, 137). Mr. Nottingham's concept plan and cost estimate do not discuss the AR or USAID report or detail means and methods of construction, such as the crane and crane pad at issue.

23. Mr. Nottingham read the AR and saw inconsistencies between descriptors by a geologist(s) that the soils were "very soft" and blow count data that indicated "not a bad soil" or a "pretty good soil" (tr. 2/61, 63). He placed more reliance upon the latter. He noted to CCI's proposal team that all of the borings were in one place, did not cover the large project, and they should seek more information. There was general information that could be used but not in any detail. (Tr. 2/35, 44-45, 63-64, 67)

24. On 22 May 2008 Weston posed several questions to MAJ Joseph Brands, the government's point of contact for project questions, including:

5) Geotechnical Conditions: Will the government be providing any bidding assumptions associated with the existing geotechnical conditions? For bidding purposes, should the contractor assume the three borings provided are representative of the entire site?

[Current SOW represents undue risk to the contractor based on the unknown conditions. A fair basis for bidding is required.]

(Ex. G-469)

25. RFP Amendment No. 2, effective 6 June 2008, included questions posed by potential offerors and answers (R4, tab 104 at 1-2). The following are pertinent:

Question 11: Soil investigation not enough we need more point of locations.

Answer 11: The best soil investigation data available to the government is provided in Appendix-C Geotechnical Investigation of the SOW [the AR]. The contractor should assume the data provided in Appendix C is representative of the project site.

(R4, tab 104 at 8)

Question 42: Geotechnical Conditions: Will the government be providing any bidding assumptions associated with the existing geotechnical conditions? For bidding purposes, should the contractor assume the three borings provided are representative of the entire site?

Answer 42: The contractor should assume the three borings provided are representative of the entire site for the purposes of developing a proposal. However, additional geotechnical information maybe [sic] required during the design phase of this project.

(*Id.* at 13) Amendment No. 2 also added an April 2003 report from Stevedoring Services of America, BERGER/ABAM Engineers, Inc. to USAID, called Draft Umm Qasr Port Assessment (USAID report). The amendment stated: “**DISCLAIMER:** *The report is provided for information only. The Government cannot guarantee the relevance, timeliness, or accuracy of these materials*” (R4, tab 104 at 2, tab 107) (emphasis added).

26. USAID report, § 3.1.5, “**Geology,**” noted that:

The streams are alluvial and the channels are apparently composed primarily of sand and silt. Clay may be present, but no clay balls were seen in the dredged material disposal areas. There is a thin film of sun-cracked silt or clay at some of the final settlement ponding areas. Boring information shows the materials encountered in the original “new” port excavation as

silty sand with small fine gravel and clay. Infill sediments since then may be of a finer, more silty nature.

(R4, tab 107 at 10)

27. USAID report, § 3.1.9, **“Shoaling Patterns and History,”** stated:

UMM Qasr Port is adjacent to an embayment [that] is the estuary for several small rivers that drain a wetland area north of the Port....

The channel downstream...follows the typical pattern of sediments deposited in bar formations on the insides of the bends. Additionally, as the inlet widens downstream and current velocities are reduced, cross channel bars are deposited that are shaped by upstream and downstream tidal currents into typical ebb-flood pairs.

The channel bends and the cross channel bars are areas where maintenance dredging will be focused. In the Port, deposition occurs along both sides in the “old” port, requiring maintenance dredging along the berths and along the opposite shore....

...Suspended sediments entering the [“new” port] cut on the incoming tide settle out in the quiet water primarily at the sides creating the need for maintenance dredging at the berths. The eastern side of the cut is shoaled extensively.... Recently constructed dikes should eliminate this shoaling source....

A spit grows from river channel sediments at the entrance of the “new” port cut. This spit requires regular maintenance dredging.

Nearly continuous maintenance dredging of the berths and approach channel from the Pilot Boat Station will be required to keep the Port viable. The existence of a large number of dredge vessels in various states of functionality appear [sic] to confirm that requirement.

(R4, tab 107 at 11)

28. USAID report § 3.2.8, “**Past Dredging and Disposal Practices**,” stated:

There are sizable upland dredged material disposal areas nearby, opposite both the “old” and “new” ports. A large estuary area behind Berths 13 to 16 has also been utilized as a cutter-suction dredge disposal site. Dike and spillway construction and maintenance do not appear to be a high priority, with some dredged materials finding their way back to the Port waters.

The British Military indicate that...some of the cutter-suction dredge materials were simply sidecast in the river channel opposite or downstream of the “old” port....

Hopper dredged disposal was reported to be just downstream of the work areas. There does not appear to have been any consistent effort to haul the dredged materials any distance to insure their non-return to the shoaling locations.

(R4, tab 107 at 13) The report also noted that there were dredged material disposal sites not far from the old and new ports (*id.*, § 3.2.9).

29. CCI alleges that the USAID report “explicitly indicates” that scouring would occur at the project site, eliminating all sediment and silt, regardless of any dredging practices (app. reply br. at 7). While acknowledging the scouring mentioned by Mr. Nottingham and Dr. Briggs (finding 20), we find that neither § 3.1.9 nor any other section of the USAID report suggests that all sediment and silt would be scoured from the site, regardless of dredging (R4, tab 107).

30. Mr. Nottingham responded affirmatively to questions posed by CCI’s counsel as to whether he and the “CCI team” had relied upon the RFP’s answers to questions 11 and 42 in developing “your proposal for Umm Qasr.” “Yes, that’s all we had. And we were instructed to do that. So that’s what we did.” (Tr. 2/45-46 (question 11)) “Yes. We had nothing else.” (Tr. 2/47 (question 42)) Mr. Nottingham looked at the three borings in helping to prepare the proposal (tr. 2/56) and relied upon blow counts as “the only really non-subjective information” (tr. 2/133). He relied upon the borings to determine whether the project could be built from the land (tr. 2/47), but acknowledged that the data was insufficient for that determination:

Q After receiving that answer [to question 42], did you determine whether or not the data provided in the three

bore logs was sufficient for the team to determine whether or not this project could be built from the land side?

A *It wasn't sufficient, but it was what we had and using those borings, as representative of the whole site, we determined that you could probably buil[d] it from the land side. [Emphasis added]*

(Tr. 2/48, *see also* tr. 2/67 (Based upon Mr. Nottingham's "preliminary analysis," using available data, apparently prior to receipt of the answers to questions 11 and 42, it "looked like" shore-side construction would be viable. There is no evidence that his analysis was memorialized in writing.))

31. Mr. Nunn testified credibly that, in the proposal planning meetings, the AR was not the basis of any of the project constructability discussions (tr. 2/213).

32. At the time of the project, PCI had never been awarded a federal contract and Mr. Nunn had not been involved as a contractor in an open cell construction project. PCI marketed foam insulation and other things. It was formed to seek work in the Middle East. Mr. Pelant, who had some small scale marine construction experience, did not have open cell experience. With PND, he put together the proposal's technical and management approach and the preliminary schedule. Mr. Nottingham was PND's main representative. Mr. Hartley, a PND principal, was not involved at the proposal stage and Mr. Nottingham did not consult him. (Tr. 2/210-12, 4/9, 16-17)

33. The parties agree that CCI submitted its alternative open cell pier proposal to the Corps on or about 23 June 2008 (app. br. at 16; gov't br. at 8, ¶ 13). Mr. Pelant prepared its narrative, with input from others at PCI, PND and CCI. He worked with Messrs. Jeff Mekinda and Hutton of CCI on the pricing. He described Mr. Mekinda as a tradesman and plumber and Mr. Hutton as an architect who had worked in business development. (Ex. G-26, part 1 at 32-33)

34. On 23 July 2008, the CO noted that CCI had not submitted a dredging cost. He also stated that its cost proposal was very high compared to the government's estimate and asked for a final revised one. (R4, tab 156 at 177701-02; tr. 8/93) On about 14 August 2008, CCI submitted a revised proposal (ex. A-4). Under "Schedule constraints specific to Engineering," it stated:

- a. Geotechnical and marine/bathymetric surveys. These are hard constraints as it is critical to identify exactly where the proposed port structure will be most advantageously located. The information from the surveys is critical and

drives the design as well as material quantities for procurement and civil works. *We feel that there is not enough information provided in the RFP and subsequent amendments to properly ascertain this information to the required degree of accuracy for quality design and engineering.* [Emphasis added]

(*Id.* at 8304)

35. CCI does not claim, and there is no evidence of record, that it performed any geological testing of the site prior to contract award. There is no written analysis of record by Mr. Nottingham, or anyone else from PND, CCI, or PCI, at the time CCI submitted its initial and amended proposals, of conditions that would allow land-based construction or any contemporaneous written expression of reliance by CCI upon the AR or USAID reports. CCI's proposals did not contain a defined construction plan concerning the earthworks and filling operations or any statement of assumed ground or soil conditions. They did not mention a crane pad or 280-ton crane, a plan to use a land-based crane to drive sheet pile, or any land-based construction approach. (Tr. 6/110-11, 13/179; *see ex. G-16* at 9, 22) However, CCI claims without rebuttal that an attached photograph depicted open cell dock construction from the land (app. reply br. at 6).

36. On about 20 August 2008 the Corps requested "Best and Final" offers. CCI responded on 26 August 2008. The Corps found that its open cell proposal was the most acceptable of the proposals. (R4, tab 160; tr. 1/150, 8/36, 39, 45-46)

37. Mr. Burke asked Robert Dyer, a well-known consultant well experienced in construction management, to perform a risk analysis of CCI's proposal (tr. 1/62-63, 143-44; *ex. G-27* at 93). Mr. Dyer's 3 September 2008 analysis identified several areas of significant to severe risk, including that CCI had not done a project estimate or seen the base contract. There was very little estimating breakdown, with much of the material from Iraqi subcontractors. He acknowledged that CCI wanted its "foot in the door" in the Middle East but found profit, overhead, construction and design contingencies, and cash flow inadequacies in its proposal. General project site conditions were not discussed. He interpreted the proposal as carrying 5% profit, only about half of which would go to CCI, whereas major foreign and United States construction contractors in Iraq had 30 to 40% profit factors. While he had been told that the proposal included home office overhead, he found the amounts to be unacceptably low and inconsistent with its normal 13.5% rate. He noted that CCI had reduced its price by over \$7 million and opined that there could easily be a shortfall of over \$15,600,000. Citing the tight project schedule, with only 10 months for the base period and liquidated damages of \$2,700 per day, he suggested it could be a good decision to step away. (R4, tab 162 at 162753-57)

38. According to Mr. Burke, CCI's proposal did not include overhead and profit. According to him and Messrs. Nunn and Pelant, it expected further negotiations on those matters. (Ex. G-26, part 2 at 244-46; tr. 1/59, 2/161-62); *but see* R4, tab 173 (Hutton 16 September 2008 email to Burke ("we may be taking this project at a lower profit in anticipation of other work.")). On 7 September 2008 Mr. Pelant notified the CO that CCI expected to negotiate overhead and profit (ex. A-5 at 12688). On 9 September 2008 Mr. Pelant notified the project team and/or others that CCI would pose questions and concerns to the Corps because "we feel we can't successfully prosecute this project for the price with the amount of unknowns that still exist" (R4, tab 163 at 16296).

39. On 10 September 2008, the CO notified Mr. Pelant that PCI's \$38,462,386.58 offer for the base and option 1 periods had been accepted and attached her signed copy of the contract, which named PCI as the offeror (ex. A-6 at 12019-20, 12036).

40. Mr. Burke asked the CO about overhead and profit. The Corps does not deny that she said it was out of her control at that point, but there would be contract additions and change orders with higher overhead and profit rates. Mr. Burke felt that, under those circumstances, CCI would make money. The Corps never informed CCI that it was compelled to sign the contract; it elected to do so. (Tr. 1/59-60, 61-62, 156-57, 8/51)

41. The contract, awarded 10 September 2008, incorporated the above RFP provisions and contained clause SCR 4, RESPONSIBILITY OF THE CONTRACTOR FOR DESIGN—MAY 2002. It also included the government's exercise of its option for Pier 2, a floating pier. The contract completion date was 27 September 2009. (R4, tab 3 at 1-2, 6, 24, 102-05 of 114; tr. 2/79; *see* R4, tab 19 at 1; tr. 5/124)

42. On 16 September 2008 Mr. Nottingham sent to PCI's Paul Johnson (tr. 2/91, 149) a drawing of "immediate survey and bathymetry needs," stated that four soil borings were needed, and specified boring and sampling criteria (R4, tab 171 at 7774). The same day Mr. Johnson reported about a meeting with PND:

- The need to get IMMEDIATE efforts on the field work was emphasized over and over again. It was apparent that *due to a lack of data on soils, bathymetry, etc.* [sic] could really pose design delays....

....

- PND needs to get a copy of the contract between CCI/PCI and the Corps for the project – so that they

can clearly get an idea of the design considerations, etc.

- Lee discussed his desire to get spec requirements for the soils needed for the back-fill from PND. PND outlined their requirement for gradation and the threshold requirements for the first 70ft of the back-fill. It was initially felt that the previously dredged material should work.... PND stated that after the first 70ft,...could essentially use residual material found on site or other fill. The only gradation requirement was near the sheet pile.

....

- Need 2 150 ton cranes to install sheet pile....
Back-fill can actually be started prior to receipt of sheet piles and will serve as crane staging point rather than using barge based cranes to install sheet pile.

(R4, tab 174) (Italics added)

43. The Corps contends, based upon the foregoing and otherwise, that CCI shifted from a marine-based to a land-based construction method after contract award (e.g., gov't br. at 36; see tr. 13/164). CCI counters that land-based construction was always contemplated (app. reply br. at 5). As noted, CCI's proposal did not directly address its construction method. Mr. Nunn testified credibly that, during the proposal stage, there was no consideration apart from land-based construction of the open cell system (finding 17; tr. 2/154-55). Mr. Hutton testified at his deposition that construction was intended to be by land-based crane (ex. G-27 at 12). We find that the weight of the evidence is that CCI intended to use a land-based construction method for its open cell system.

44. PCI and SAR apparently entered into a contract dated 10 October 2008 in connection with the project (R4, tab 177). At some point PCI terminated the contract due to SAR's alleged failure to perform (ex. G-26, part II at 207-09).

45. PND and PCI entered into an agreement for professional engineering services in connection with the project effective 10 October 2008. Prior to the Corps' contract award, PCI did not ask for, and PND did not perform, a constructability analysis or evaluate the equipment or materials the contractor would need. Mr. Nottingham did not prepare a formal slope stability analysis to determine if the beach could support a crane pad, but testified that the borings indicated it could. He did not calculate a factor of

safety (FOS) based upon a load on shore. He was not consulted about crane pad design and did not do any written analysis of the AR. (R4, tab 178; tr. 2/100-04, 240)

46. The pre-construction meeting occurred on 18 October 2008 (*see* ex. A-13 at 19191). CCI and PCI entered into an agreement dated 27 October 2008 concerning their teaming arrangement (R4, tab 180). The NTP apparently issued in late October or in November 2008 (*see* gov't br. at 36, PF 100 (unrebutted as to NTP)).

47. On 19 November 2008, Carl McNabb, a PND engineer (tr. 2/78, 194), wrote to Mr. Nunn that, for its pile schedule, PND was making several assumptions about the soil, one of the more significant being that the sand layer was at -11m. He noted that the AR's average SPT value from the clay layer in the soil logs was what PND would normally expect from stiff clays but the clay was described as very soft to soft. He asked about more soil borings and a hydrographic survey. (R4, tab 184 at 18918)

48. On 19 November 2008 Mr. Nunn inquired of GRS about core drilling by Weston that PCI had observed during site investigations. GRS referred him to the AR, stating that it had supported a preliminary design analysis by Weston in 2007 for an L&T pier system at the site. (Ex. A-98; tr. 8/81)

49. On 20 November 2008, Mr. McNabb informed Mr. Nunn that PND was on track for a sheet pile order:

[B]ased on assumptions anticipating the worst case in existing conditions. *This is due to the lack of soil data with consistent soil parameters* and firm vertical control. It's also due to the bathymetry based on a photo that lacks horizontal control.

(R4, tab 185 at 18925) (Emphasis added)

50. On 22 November 2008 Mr. McNabb informed Mr. Nunn that "[w]e've been pouring over the [AR]...from the start" (R4, tab 187 at 18405). Mr. McNabb noted boring issues, including that the sand layer location was not clear and "[t]he clay is described as 'soft'; the blow counts indicate it's stiff; while the lab results for the cohesion (c) varies drastically" (*id.*). He stated that more borings were needed and if reliable information could not be obtained "now," confirmation during construction must be obtained (*id.*). Mr. McNabb's reference to "from the start" is not clear. There is no deposition testimony of his of record and he did not testify at the hearing. The Corps contends without persuasive rebuttal, and William Gunderson, PND's Designer of Record, testified at his deposition, that, apart from Mr. Nottingham, PND's design team became involved in the project after contract award. PND did not analyze the contractor's means and methods of construction. (Ex. A-214 at 12, ex. G-28 at 28, 30-32; gov't br. at 36, PF 100)

51. On 23 November 2008 Mr. Pelant expressed concern about a design change reducing the cells to 39, 44% fewer than proposed, but increasing steel tonnage and cost to the client by about \$500,000 (R4, tab 188 at 172448). Mr. McNabb responded:

The tonnage is high because we don't have solid data on where the requisite sand layer is. During construction, if we're not deep enough and into the sand, we won't meet the req'd safety factors. Plus we don't really know what the cohesion of the clay is. It's probably quite high, which is good, but what if it's not?

(*Id.* at 172447)

52. On 24 November 2008 Mr. Pelant expressed concern to Mr. Nunn that the September completion date was causing them to rush and the designers to be overly conservative, at significant cost (R4, tab 188 at 172446). He responded:

The Corps knows we are tight on \$ and they are working with us.

We can still work two cranes side-by-side if we need to juice up production...The Corps will give us some schedule relief, if the boats are not coming until 2010, but I don't want more time. I want more Corps/FMS work. Early finish should get us just that.

(R4, tab 188 at 172446)

53. Mr. McNabb disagreed with Mr. Nunn's 24 November 2008 statement that one AR BH was "practically in our Start-Up zone of influence, so we should be very comfortable with the pile design and sheet lengths in this...area." Mr. McNabb referred to prior emails "regarding problems with existing bore logs." (R4, tab 189 at 18936)

54. On 26 November 2008 Mr. McNabb stated that AR problems included:

1. The cohesive properties of the clay vary widely in the report, from 12 to 34 kpa.... The average SPT...values in the clay layer range from 4 to 11,...normally expected from stiff or very stiff clays (c=50 kpa or larger). Meanwhile, the clay is described in the report as very soft to soft.

2. No surface elevations for each [BH] location were provided.

3. Normally, a larger number of [BHs] are provided, typically on a 200-ft. grid.

I haven't heard back from Andrea Test Laboratories about my inquiries on the report.

(R4, tab 189 at 18934)

55. Per Mr. Nottingham, PND sought more borings to verify its design. The existing ones showed "sand, a very hard layer...a very good foundation" (tr. 2/49), and it wanted to verify that, once it was offshore, it would encounter the same strata. However, it learned that it would take four months to obtain more borings and decided to evaluate the strata through the construction response when it drove the sheet piles. (*Id.*)

56. At the 35% design review on 17-18 December 2008, Mr. Gunderson stated that one reason the open cell concept was right for the project "is that you have difficult soil conditions here" and it was easily adaptable (R4, tab 114 at 2; ex. A-12; tr. 8/61-62).

57. Navy LT Daniel Gutierrez, a civil engineer, was the CO's Representative (COR) from just before the 35% design meeting until 5 June 2009. Mr. Nunn viewed him as the best COR he had worked with in his then 23 years' experience and subsequently. (Tr. 2/199, 8/66, 10/6, 7, 16, 67, 74)

58. PND's DESIGN CALCULATIONS report of January 2009 (R4, tab 116) stated that design soil profiles and properties were based on the AR and that:

Because of limited geotechnical information available for the site, some significant assumptions are made for the design of the seawall. Most notably, the elevation of the sand layer is assumed to be 11 m throughout the site....

....

Fill: The material for the fill/embankment layer has not been determined, but is expected to be granular....

Clay: The clay layer is overlain by the fill layer and consists of slightly overconsolidated clays and sandy clays. *The*

design soil properties are typical for very soft clays, although the blow counts in the logs indicate much stiffer soils...

Sand: The sand layer is overlain by the clay layer. The consistency of the soil, based on the blow counts, is dense to very dense...

....

It should be noted that there appears to be some inconsistencies in the [AR]. Also, none of the [BH] are within 100m of the proposed seawall face. Thus, the assumed elevations and soil properties based on the [AR] report may differ significantly from the actual site conditions.

(R4, tab 116 at 10-11) (Emphasis added) Design soil properties included in a table in PND's report show the cohesion of clay in its undrained state at 20 kPa, which corresponds to "Very soft" clays (R4, tab 2 at 15, tab 116 at 11).

59. On 1 January 2009 CCI had the Basra "University Lab" do BH drilling. "North" borings were attempted in the area of AR BH No. 2 but were not successful. "South" borings were taken about 10 to 12m past the visual toe of the rip rap slope. (R4, tab 192 at 62889; tr. 2/167-69; see ex. A-249) In January 2009 the laboratory submitted a soil investigation report to the "SAR Group" (Basra report) which stated that the purpose was to explore the site's subsoils for foundation design for the new port, and that two BH were drilled on the shore at locations selected by the SAR Group (R4, tab 21 at 4). The soil strata at the Basra report's BH Nos. 1 and 2 were reported to be as follows:

1. (BH1)

- i- The top soil layer which extends to a depth of 5.0m consists of fill material (subbase).
- ii- The next layer which extends to the end of boring consists of dense to very dense, red to brown, poorly graded and sometimes well graded sand.

2. (BH2)

- i- *The top soil layer which extends to a depth of 1.0m consists of fill material (subbase).*
- ii- *The next layer which extends to a depth of 15.0m consists of clayey silt with trace or a*

little of sand with low plasticity. The consistency of the upper part of this layer is soft clay (up to depth 12.5m) and then changed to stiff clay.

- iii- The bearing stratum which appears at a depth of 15.0m and extends to the end of boring consists of dense to very dense, red to brown, poorly graded and sometimes well graded sand.

(R4, tab 21 at 10) (Emphasis added) The distance of these apparently “south” BHs from those in the AR is unclear.

60. On 5 January 2009, Jim Bates, a professional engineer and PCI quality control (QC) manager (R4, tab 209; tr. 2/171), summarized the upper strata in the Basra report’s “south” BH for Messrs. McNabb and Nunn:

0-1m, access ramp fill

1.5-5m, grey *very soft silty clay with organic material*

6.5-10m, grey to black *very soft clayey silt to silty clay*

(R4, tab 192 at 62889) (Emphasis added) On 12 January 2009 he reiterated that the clay was described as “very soft” (R4, tab 196 at 23955).

61. On 12 January 2009 Hal Dreyer, president of PCI’s subcontractor Gunderboom, Inc., of Anchorage, Alaska, conveyed his concern to CCI’s Mr. Hutton that Mr. Nunn had underestimated the project work and time (R4, tab 197). Among other things, he noted that the river had “extreme sedimentation” (*id.* at 176333). Gunderboom was owned by several people, including Messrs. Dreyer, Gunderson and Nottingham. Mr. Dreyer had considerable experience successfully superintending significant open cell construction projects and Mr. Nottingham trusted his judgment. (Tr. 2/87-89; *see* R4, tab 383 at 161460). Although he tried, Mr. Dreyer was unable to visit the site due to administrative issues (tr. 1/78-79, 5/210, 9/60-61, 87). Gunderboom’s project superintendent, Dave Robinson, very experienced in open cell construction, sent daily reports, which Mr. Dreyer and Kevin Cassidy, Gunderboom’s experienced project manager, reviewed. Messrs. Robinson and Cassidy also communicated orally. Mr. Cassidy visited the site before construction and once after it started. (R4, tab 251 at 116143; tr. 9/44, 46, 103, 114, 117, 12/22)

62. PCI's time and materials subcontract with Gunderboom, to drive pile and build the open cell dock structure, was signed effective 20 January 2009. It did not include building the temporary crane pad and Gunderboom was not responsible for fill, except for managing placement of the fill that would go into the cells. At the time of subcontracting, Mr. Dreyer did not review the project solicitation or the AR. He had not been involved with CCI's proposal. (Tr. 9/19-20, 30, 42, 81; *see* R4, tab 383 at 161460)

63. Throughout the project Mr. Dreyer was highly critical of PCI, claiming, *inter alia*, that its personnel lacked experience and knowledge and did not appreciate or know how to work with the soil conditions, or understand the need for an engineered fill design (R4, tabs 197, 201 at 175506, tab 216 at 20660; tab 221 at 8204, tabs 232, 233 at 14427, tabs 234, 236 at 36835, tabs 237, 238 at 37316, tabs 239, 248, 250 at 35610, tab 251 at 116142, tab 272 at 20573-74, tab 370 at 162666, tabs 326, 383 at 161466; tr. 9/47, 50-52, 57-60, 62-63, 79). A few of his allegations are set forth below.

64. Shortly after the 99% design meeting on 10-12 February 2009, construction, late in starting, began (exs. A-19, -20, G-27 at 20).

65. An open cell schedule must include time for fill to consolidate, which depends upon its quality. At a 26 February 2009 contractor meeting, it was noted that, assuming cells could be completed in five days each, the project was about two months past the completion date; it would be necessary to run a double shift; and PCI's schedule did not have an item for "settlement," estimated to take about six weeks. The work plan under discussion did not include crane pad activities. (R4, tab 203 at 4891; tr. 3/54, 9/39)

66. Although it had contemplated using two 150-ton cranes (*see* findings 42, 52), Mr. Nunn concurred with the Corps that CCI's ultimate plan was to construct a crane pad above the tides, 75m into the water, pull a 280-ton crane on to it, and extend the crane's arm to open cell one. He acknowledged that PND was not consulted about any crane pad design prior to work on the beach and there were no design drawings or crane pad specifications at the time, other than a materials requirement. (Tr. 2/258-59)

67. On about 25 March 2009 PCI executed a work order for crane pad construction with subcontractor Ravsan Raheem of Basra. He was to provide Type C material for a crane pad 40m wide and 83m out, at an average depth of 4m. PCI was to provide the design layout. The subcontractor was to push Type C and/or stockpiled material over the top of the seawall; grade, water and compact it to 95%; grade the pad so the leading edge was 7m above mean lower low water (MLLW); place the fill in .3m lifts; and lay geotextile fabric to prevent fill loss. (R4, tab 208)

68. A 28 March 2009 checklist by QC manager Bates pertained to the work road and crane pad, which he called a non-definable work feature. Unclassified fill was to be

delivered when work started; the laydown pad would serve as material storage initially; the work road would be built from unclassified material with 7% minimum and 10% maximum fines; material was to be in 30cm lifts and compacted to 95%; water was to be added to get 95% compaction; final grade would be at 6.0 above MLLW; and CCI was setting up an on-site laboratory for sieve and compaction testing. (R4, tab 209)

69. On 29 March 2009 PCI began placing unclassified fill for its work road and crane pad. It had hired Iraqi subcontractor Noor Alahmed to provide the fill. Mr. Hartley described the pad as consisting of imported sand without geosynthetic reinforcement. (Ex. A-91 at 36364; *see* R4, tab 131 at 3/29-31/09, tabs 241, 253)

70. Starting on 30 March 2009 the work road and crane pad material suffered from "pumping" silts and weak clays, cracking, and sloughing (R4, tab 17 at B, tab 130, tr. 2/172-73, 182-83, 6/48; ex. S-72).

71. On 1 April 2009 QC Bates opined to Mr. Nunn and others:

As Samuel [Pelant] said, the underlying material is the problem and not the fill. Base[d] on the borings and my observations, the underlying silt/clay has near zero strength. At first we thought pumping silt was the problem. Now I believe liquefaction occurred due to the placement of fill (i.e., rapid loading) and vibratory compaction (i.e., earthquake). Most likely it was a combination of the two....

(R4, tab 212 at 62760)

The fill we are bringing in is good. Let me qualify that.... Yesterday (3/31) we received material that wasn't as good as the first two days and we dinged them on price. We also halted the delivery of this material by late morning.

We constructed the work road as you suggested by making sure the top of the fill was above the high tide line. That is when the problems started. The underlying silty clay/clayey silt [h]as very little strength (N=2 for this material in the south boring).³ By placing the fill load on this stuff, I believe we caused liquefaction to occur.... For me this was confirmed by observing the beach in front of the fill this morning at low tide. A classic liquefaction failure with blocks of material

³ "N" values are the number of blows needed to drive a special sampler 12" (tr. 6/34).

sloughing and flow of material in the lower portions of the beach. It looked like pictures of Earthquake Park from 1964.

...Keep in mind that the south boring had 12.5 m of this loon [poop] (old geotechnical term).

(R4, tab 212 at 62758-59)

72. The COR was on site shortly after lay down area and work road construction began. He saw that CCI was using a local borrow pit for fill, rather than an engineered fill. He described it as a very gritty, silty soil. (Tr. 10/41, 43-46) Prior to April 2009 CCI had not begun work on an engineered fill for the crane pad; into May 2009 it continued to import fill (R4, tab 132 at 4/2/09 *et seq.*, tab 134 at 5/2/09 *et seq.*; tr. 2/254). The parties agree that the supplier was terminated but CCI does not concede that it was due to the material's poor quality (gov't br. at 48, PF 134; app. reply br. at 24). On 7 April 2009 Mr. Gunderson inquired of Mr. Nunn:

As you have begun placement of the fill out to create a work pad, it would be an appropriate time to do another boring to get a profile of the sediments under the fill you are placing. We are assuming that you are using some fabric under the fill as you move offshore? I know that Hal [Dreyer] has requested an engineered fill where the crane is going to work from. Since we have not heard from PCI can we assume that you are working with your fill contractor on this?...

(R4, tab 218) Mr. Nunn asked Mr. Gunderson for an engineered fill design. On 12 April 2009 work road and crane pad activities were suspended to obtain it. (R4, tab 219 at 10672; app. supp. R4, tab S-2) Gunderboom had sought an engineered fill because it was concerned about the competency of the underlying material, the native soils, and safety regarding the 280-ton crane (tr. 9/45-46).

73. On 10 April 2009 a QC report sketch and photograph showed that, apparently beginning at a 6m elevation, there was "[c]atastrophic failure (liquefaction) of in-situ silts and clays with continual failure of fill from 25 to 50 meters" (R4, tab 223 at 19954).

74. On 17 April 2009 PCI issued a notice to proceed to Gunderboom. Mr. Dreyer stated that his need for appropriate fill to support a 280-ton crane that would be operating a vibratory hammer, equipment acquisition delays, and work crew composition issues would affect the schedule. (R4, tab 233 at 14427) On 21 April 2009 Mr. Gunderson stressed the need for a boring where the crane would sit before placing it. Mr. McNabb opined that the work pad had to be in place first. (R4, tab 247 at 4566)

75. After the slope failure at the end of March 2009, PND was asked to advise PCI. Mr. Hartley arrived in Iraq on 25 April 2009. As of that date CCI was attributing soil problems to dredge pond leakage and overflow and that the work area was disturbed by manmade activities. Mr. Hartley evaluated the soils available for fill for crane pad construction by visual classification using ASTM standards. He found sand with 5% silica and a small amount of gravel, not unusual for crane pad construction. Rip rap would have been better but it was unavailable. He did vane shear tests in the top soil surface and used rebar to see how soft the material was. He roughly assessed shear strengths for PND's Seattle office to make a soil stability analysis. The field values that he obtained were lower than the AR data. (R4, tab 24; tr. 4/18, 20, 42-43, 46-47)

76. On 27 April 2009 Gunderboom's project manager Cassidy referred to "the mess [PCI] made in the area where the crane [needs] to go" (R4, tab 251 at 116143). Mr. Dreyer worried that PCI might have "completely ruined the sub base material and rendered it useless, which was the concern from the outset" (*id.* at 116142).

77. On 30 April 2009 Mr. Nunn asked for a contract extension due, *inter alia*, to "changed conditions" in the work road location due to excess water and pore pressures from dredge spoils pits (R4, tab 25 at 1). On 3 May 2009 the contractor attributed a "small mud wave" to dredge pond seepage (app. supp. R4, tab S-3).

78. On 1 May 2009 Mr. Hartley wrote that he had recommended to PCI that it get BHs out by the cells as soon as possible and that "we really do no[t] know much about soil conditions in these areas" (R4, tab 259 at 14042).

79. On 3 May 2009 Mr. Hartley asked for a slope stability analysis under certain conditions, seeking an FOS of at least 1.1, preferably 1.3 with the crane loads, based upon industry standard for a minimum FOS. On 4 May 2009 Mr. McNabb supplied an analysis, showing a 0.99 FOS, indicating failure. (R4, tab 267; tr. 4/175, 178-79, 184-85)

80. On 7 May 2009 the COR wrote that CCI was behind schedule, stating:

The main portion of this delay has been caused by an unexpected field condition in placing their crane pad. There is evident soil instability at the 25m mark in the tidal zone that has impeded progress because the fill material begins to creep/slide into the river. The start of pile driving...has been postponed...because of the issues with the crane pad and also the pending delivery of the 280Ton Crane from Kuwait....

(Ex. A-38 at 23110) He stated that PND's geotechnical engineer (apparently Mr. Hartley) attributed instability to dredging, which increased the deposition of very loose silty material with low bearing capacity, and to increased pore water pressure from dredge ponds, which increased the effects of liquefaction when compacted or disturbed (*id.*).

81. The COR signed an interim satisfactory performance rating dated 7 May 2009 stating CCI was very cooperative and had effectively tackled "difficult problems in a challenging work environment" but was behind schedule. Its QC documentation and submittals were rated marginal. (R4, tab 30; tr. 10/129)

82. On 13 May 2009 Tim Fisher of PND circulated a crane pad drawing to PND and PCI for review (R4, tab 283). CCI has not rebutted the Corps' contention that this was PND's first design drawing of record of the crane pad.

83. On 13 May 2009 the COR issued an RFP to CCI under the contract's Changes clause for "Drainage of Dredge Spoils Ponds" (R4, tab 32). As Mr. Nunn described it, an Iraqi Ministry of Defense contractor, not on-site during SAR's visit, was dredging around Pier 3 by the time CCI arrived and dumping the spoils into dredge ponds which came to the edge of CCI's laydown area and overlapped nearly into the crane pad area. At one time water from an overfilled, breached, dredge pond came near the access road leading to the laydown area. CCI feared flooding. It saw sheet flow across the beach after the tide had gone down and little water "volcanoes" below the dikes. It concluded there was no other water source except the dredge pond pits and this 3m of water sitting above its project had adverse effects. (Tr. 2/197-98)

84. On 13 May 2009 the crane arrived in parts (supp. R4, tab S-3 at 5/14/09 QC report (QCR); *see* R4, tab 17 at 6). There was no stable crane pad in place at this time or later (tr. 10/91-92). Mr. Hartley left the project site on 15 May 2009 (tr. 4/51).

85. The COR prepared a price negotiation memorandum (PNM) dated 22 May 2009 about the alleged Pier 3 dredge spoils pond problem. The proposed change was to allow CCI to procure pumps to drain excess water from the ponds to relieve excess pore water pressure and permit compaction and stabilization of the Pier 1 fill material. (Ex. A-41) The PNM stated:

The crane pad for the construction of Open cell one appears to [rest] on top of a very fine layer of sandy-clay, which is transmitting a flow of water at a greater rate then [sic] other locations along the water front... This water is leading to an increase of instability of the shore line at 25m and causing the fill material to creep and slide into the river.

(Ex. A-41 at 52177) The proposed \$21,250.37 amount included overhead and profit at 19% and 17.5% (*id.* at 52178). CCI alleges, without contradiction, that these were the rates to which the Corps had agreed for its options 1 through 6 proposals (app. br. at 27).

86. At some point prior to 23 May 2009, CCI decided to construct six temporary shoring cells. In its request for equitable adjustment (REA) (below), CCI attributed the decision to a need to protect soils in the construction zone from continuing silt deposits from dredging. It stated that dredging and dredge pond seepage had left the soils weaker and more slippery than expected. (R4, tab 17 at 6) Mr. Nunn described dredges dumping in front of the project instead of south of the border where they were supposed to go, resulting in “loads and loads” of slime, but stated that the major problem was at the dense sand level and concerned efforts to try to stabilize the beach (tr. 2/276-77).

87. On 1 June 2009 CCI hired John Smithson, an experienced superintendent, with open cell and schedule experience, to be its on-site representative, but left PCI in charge of project management (ex. A-53; tr. 1/87-88, 5/107-08, 110-11, 114-15, 178).

88. Effective 1 June 2009, bilateral Modification (Mod.) No. P00006 issued, at the firm fixed-price of \$21,250.37, for the dredge pond work. It increased the contract price to \$44,923,615.70; kept the 27 September 2009 completion date; and included CCI’s release of the government “from any and all liability under this contract for further equitable adjustments attributable to changes resulting from this modification.” (R4, tab 9 at 2) The Corps has not raised any release defense in this appeal.

89. Full work on the crane pad began on 3 June 2009, but on 8 June a mud wave developed in the pad, sections of the pad slid into the water and the whole pad came apart (supp. R4, tab S-4).

90. On 30 May 2009 the COR had issued a letter of concern to CCI about schedule and on 10 June he sought a recovery plan. As of 13 June 2009, inability to build a crane pad was stopping work in the field. (Ex. A-49 at 11283; tr. 10/109-10) At some point in June 2009, COR Gutierrez left the project. Kenneth Bright, a supervisory civil engineer with the Corps, succeeded him. (*See* exs. A-48, -49)

91. The crane was moved onto the pad on about 14 June 2009. On about 21 June a large mud wave developed and there was a 75m failure in the fill. The fill created shelves separated by large tension cracks and the crane pad suffered displacement. Through 21 July 2009 CCI continued to encounter problems with sloughing clay, tension cracks, a mud wave and sheared geogrid. (R4, tab 17, ex. K at 1, ex. L at 1; supp. R4, tab S-4, 6/21/09 QCR at 1-2, tab S-5, 7/15/09 QCR at 1, 7/16/09 QCR *et seq.*)

92. In its REA, CCI claimed that another change to its original design caused by differing site conditions was the construction of “Circle Cell No. 1,” or the “Single Cell Crane Pad.” It was to sit behind and between two temporary shoring cells to protect and support the beach soils upon which the crane would rest. (R4, tab 17 at 10)

93. CCI continued into July 2009 to attribute crane pad failures to dredge ponds and the discharge and deposit of dredged materials—soft, loose, weak sediments (R4, tab 17, ex. P at 2; supp. R4, tab S-4, 6/24/09 QCR at 1; 6/25/09 QCR at 2; ex. A-65).

94. On 29 June 2009 Mr. Nunn opined to the COR that the dredge spoil dumping was a changed condition. He alleged that, while CCI was well aware of dredging in the waterway and, on a different project, he had been responsible for dredging the North Port, the material had not been dumped back into the waterway in front of the Iraqi Navy Port; the Corps should have alerted offerors of the dredge spoil issues during the solicitation phase; and CCI saw the conditions only after mobilization and 99% design completion, during pre-construction activities. (Ex. A-58 at 8867-68)

95. In June 2009, PCI and PND continued to exchange emails about the need for more BHs (e.g., R4, tab 311 at 18628 (“plan for confirmation [BHs], reflecting the current access plans,” “there is only one old Andrea lab [BH] in the vicinity of our current work, and PND had taken exception to the reliability of that data”)).

96. On 3 July 2009 Mr. Nunn notified the COR of two alleged changed conditions, again pertaining to dredge spoil deposits and dredge pond seepage affecting the fill and crane pad (ex. A-64 at 22155).

97. Initially CCI was doing visual materials testing that was not certified or verified by an appropriate entity. Eventually it had Basra State University do on-site and off-site testing. CCI did not establish a Corps-approved on-site laboratory until late June, early July 2009, after COR Bright’s arrival. (Tr. 11/35, 43)

98. On 6 July 2009 CCI’s Mr. Smithson commented on a draft recovery plan:

[I]t reads that using “local material” is the reason the fill failed. I think we should make it clear that the reason was because of the water seepage from the dredge ponds and the dredge spoils sediment are the reason the fill failed. That way we are consistent with what we are saying in our REA’s.

(R4, tab 353 at 162633)

99. On 7 July 2009 National Laboratory began a site investigation for CCI. On 8 July PCI discontinued it due to alleged incompetence. (R4, tab 361 at 11877 (“National Lab was a joke”); supp. R4, tab S-5, 7/7-7/8/09 QCRs at 1).

100. On 9 July 2009 the area in front of the crane and parts of the access road dropped about 15cm with a massive mud wave forming in the temporary and circle cells. Cell movement was observed. (Supp. R4, tab S-5, 7/9/09 QCR at 1-2)

101. On 14 July 2009 CCI gave another notice of changed conditions pertaining to (1) high water levels from the Pier 3 contractor’s dredge ponds being over-filled and raising the water table on and adjacent to CCI’s work area, allowing water to flow around and under its work site, and (2) dumped dredge spoils resulting in unstable sediments being deposited onto CCI’s work area (ex. A-86 at 15239).

102. At least as of 14 July 2009 Mr. Smithson was highly critical of PCI’s project management (*see* R4, tab 370 at 162666).

103. The COR’s 16 July 2009 letter of concern sought a revised schedule, upon threat of an interim unsatisfactory evaluation, and a recovery plan (ex. A-82).

104. On 19 July 2009 Bradley West, president of West Construction Company, Inc. (West), issued a recovery plan based upon marine floating gear, including barges, to install the sheet pile. West had extensive experience in open cell construction using marine and land-based equipment. (Ex. A-87 at 36425-26) Most of Mr. West’s open cell projects were land-based and involved crane pad installation. None used geogrid, had an engineer review constructability, or had engineer drawings. However, he had never used a 280-ton crane. (Tr. 3/7-8, 82) In about August 2009, PCI and West entered into a cost-plus-fixed-fee subcontract (*see* ex. G-18 at 12; tr. 3/43, 75-76). On 20 July 2009 CCI submitted a recovery schedule, said to be required by changed conditions due to the dredge ponds and spoils. It proposed to use barge-mounted cranes to complete the open cell structure from the river. (Ex. A-87 at 36418-24)

105. On 22 July 2009 CCI submitted to the Corps Mr. Hartley’s 16 July 2009 report of conditions during his 25 April-15 May 2009 visit. He had not completed his evaluation and had asked CCI for more geotechnical work. (Ex. A-91; tr. 4/60) The report stated that dredging had raised water levels. Cell dikes appeared to consist of silty clay soils. He saw water impoundment in three dredge spoil containment cells that caused seepage into the underlying soil, including into the near shore mudflats, that would increase water content and decrease shear strength in the near shore area where fill placement had resulted in instability. Mr. Hartley opined that dredging also affected settlement and stability of the construction fill on the mudflats:

The dredging operation is less than 30 m from the north end of the project site. Attempts to obtain shear strength on the surface soils were unsuccessful (undrained shear strength of 0.0). A hand-dug hole of 0.5 m in depth was excavated to attempt additional vane shear strength testing. *Soils are so soft in this area that a laborer became stuck up to his knees when attempting to dig into the mudflats.* Once the hole was dug undrained shear strength measurements were obtained from vane shear testing and resulted in [low] shear strengths...*less than a third of the value[in the AR].* A 3 m rebar was also pushed into the ground at this location with little resistance. [Emphasis added]

(Ex. A-91 at 36367) He said that unconsolidated silts and clays with very low shear strength were distributed into the water and deposited in the construction area and that slope instability had occurred in the immediate vicinity of the dredge operations. He also reported PND's contemporaneous field shear strength assessment, which used data from the AR and Basra reports and his April 2009 shallow vane shear tests. PND concluded that the AR indicated an FOS of 3.25 at 1m fill depth, but PND found 0.94; at 3m, the comparison was 1.97 to 0.54; and at 5m, it was 1.68 to 0.41. Mr. Hartley stated that the contractor could place a very thin fill lift of about 0.5m but there was a small mud wave in front of fill operations and some tension cracks as fill thickness increased, confirmation that near-surface shear strengths were limited. (*Id.* at 36364, 36369)

106. On 23 July 2009 the COR approved CCI's recovery plan, noting that the government did not consider it to involve acceleration or differing or changed site conditions (ex. A-93 at 36392-93; *see* R4, tab 376).

107. Navy LT David Daigle (Lieutenant Commander by the hearing) became involved in the project about the end of July 2009. On 9 September 2009 he succeeded Mr. Bright as COR. (R4, tab 61; tr. 10/131, 133, 135, 137)

108. On 25 July 2009 PCI terminated Gunderboom for alleged default. Resulting litigation was settled. (*See* R4, tabs 379, 383; tr. 3/81, 5/211, 9/76-78, 88)

109. On 1 August 2009 Gunderboom's Mr. Dreyer asserted, *inter alia*, that project problems were due to PCI's failure to understand the soils issues:

Some four months into a six-month project the construction of the first Open CellTM still has not begun due to PCI's *inability to solve geotechnical problems, which were apparent to observers on day one. For example, ever since*

viewing the site photographs when we met to discuss this project in PND's offices in Seattle, Kevin and I have been concerned about the inter-tidal and offshore sediments. I am sure you will recall our extensive discussions about how unusual it was to see only the very top gun assembly from a Russian Navy Missile launcher vessel sticking out of the muck in the middle of the job site, meaning that there is an entire vessel in that soup....[Emphasis added]

...[O]n site we observed a hopper dredge operation, which may have been depositing fine silt at the project site for many years. This may have contributed to the geotechnical problems PCI has encountered. We are not privy to what precise geotechnical investigations may have been done prior to contracting to design and construct this project....

(R4, tab 383 at 161466)

110. In August 2009 the National Center for Construction Labs. & Researches, Basrah Construction Laboratory, apparently the "National Lab" CCI hired in July 2009, reported upon its investigation. The log of a boring taken at a location from which the 280-foot crane was visible shows 2m of fill on top and two layers of clay beneath the fill, with the first 9m described as "Very soft to soft gray lean to fat CLAY" and the second 2.5 m as "Hard brown lean CLAY." (R4, tab 382 at 16352; tr. 6/133-36, 138)

111. CCI submitted an REA in August 2009 for \$20,905,039.53 and an extension based upon changed or Type II differing site conditions and acceleration. It stated that PCI was familiar with the specific project region and that post-award information, including site re-inspection, had not altered PND's original opinion that beach soil conditions were stable enough to construct the open cells and use heavy equipment, including a 280-ton crane. The REA alleged that there was no indication that soils within the construction zone had extremely low shear strength; were subject to substantial silting from dredge spoils; and would make building a work road and crane pad commercially impracticable, if not impossible. It stated that CCI knew that tidal action affected the water table in the naval base's lower reaches, but alleged that, almost immediately, it had problems due to unexpected concentrations of silt and weak clays. It tried compaction, lifts, and smaller, lighter equipment, but the pad continued to slough and crack. It stated that some cells were to have been temporary enforcement of the crane pad embankment, but they had to be permanent, due to the changed conditions relating to the dredge spoil sediment and dredge pond seepage. (R4, tab 17 at 1-5, 21)

112. Bilateral Mod. No. P00007, effective 28 August 2009, extended the contract completion date to 1 March 2010; the price remained \$44,923,615.70. It stated that it was to facilitate authorizations and did not affect any REAs, claims or the construction completion date. (R4, tab 10)

113. In August to early October 2009, largely in Dubai, CCI and West engaged in equipment procurement efforts to implement the recovery plan (R4, tab 16 at 18, tab 48 at 1, 66, 67, 73, 74, 80, 81).

114. On 14 September 2009 the COR issued a fifth letter of concern and GRS issued an interim unsatisfactory performance evaluation. CCI disputed it but admitted it would not be able to meet its recovery schedule. (R4, tabs 68-71; ex.A-151 at 6114-15)

115. MAJ Gerald Himes held a master's degree in civil engineering but was not a geotechnical engineer. In late July-August 2009, LT Daigle became COR and Mr. Bright the alternate. By late August Lt. Daigle and MAJ Himes were doing the contract administration. MAJ Himes visited the site in August 2009 and saw what he described as CCI's construction method of pushing fill and whatever was underneath it into the water (*see also* tr. 10/46-47 (COR Gutierrez's description of fill dumping and pushing, or pulling sediment out into the shoreline)). When CCI submitted its REA, MAJ Himes coordinated the government's technical support, including from ERDC, which gave him a draft report on about 3 September 2009. (Ex. A-126 at 2727, ex. A-135 at 33499; tr. 9/131, 134-35, 137-38, 145-50, 162-63, 179, 200-01, 243-44, 11/62-63, 167)

116. In September 2009 former COR Gutierrez commented to GRS upon the REA. He denied a contention by CCI that he had stated that a change order was appropriate and alleged several reasons why it was not. He also stated that "[o]n numerous site visits it was confirmed that there was quite a[n] interesting phenomenon occurring at the 25m near shore line, this is undeniable" and that "the problem started and is tied to an unforeseen sight [sic] condition." (Ex. A-135 at 33494, 33496) He was adopting CCI's unforeseen site condition vocabulary but believed contemporaneously that its problems were tied to such a condition (tr. 10/122).

117. On 18 September 2009 ERDC issued its complete report (ERDC report) on the question of whether the Corps-furnished documents for proposals were sufficient to predict the crane pad construction difficulties (R4, tab 108 at 1). Referring to the AR and BH logs, ERDC stated that "[c]lays possessing a *soft to very soft* consistency pose a significant challenge to any design that requires them to carry any additional loads" (*id.* at 2). Addressing soil strength, ERDC concluded that the AR had not reported the results of unconsolidated undrained triaxial (UU) compression tests in the best manner, but it had noted that laboratory vane shear equipment had been used to obtain the undrained shear strength because of high disturbance in all samplers that extruded from Shelby tubes of

the soft clay layer. Also, the soil exuded between the fingers when squeezed, which could be described as very soft to soft sandy clayey soil, and the laboratory vane range was within the range for soils with soft to very soft consistency. ERDC interpreted the AR to mean that UU tests were to be discounted because of the high degree of disturbance and that the laboratory hand vane tester gave the most reliable results. It adopted the vane test data as the basis for undrained shear strengths in its stability analysis. The results of ERDC's crane pad slope stability analyses, based only upon the geotechnical information the Corps had made available to proposers, were that stability decreased with increasing fill height; the crane pad would be stable for a fill height of 1m, marginally stable for a fill height of 3m, and unstable for a fill height of 5m. ERDC stated that PND's 16 July 2009 slope stability analysis indicated that the crane pad would be stable for fill heights up to at least 5m, but noted that the strength of the clay layer in PND's analysis was determined from the UU laboratory tests taken from the highly disturbed samples that the AR had warned against using. (*Id.* at 2-6) ERDC concluded, *inter alia*, that the "very soft to soft" consistency of the foundation clays described in the AR should have served notice that dock construction and long-term performance were causes for concern; the high level of disturbance in the soil samples was a direct result of the very soft to soft clay consistency and caused significant uncertainty in determining shear strength for slope stability analysis; it was certain that the clay consistency was very soft to soft; and lack of information regarding which samples were tested in the lab vane tests or how many tests were performed increased uncertainty (*id.* at 6-7).

118. The CO denied CCI's REA on 30 September 2009, summarizing in part:

The conditions...were both known and what would typically be found in a sediment laden tidal estuary.... Soil borings indicated that the surface and subsurface soils at the site consisted of unconfined very soft sandy silty clayey mud. Whether it arrived as additional dredged material or as naturally occurring sedimentation; the fact that the soil was saturated silty mud was known or should have been known to an experienced marine contractor. The [AR]...put the contractor on notice that the soils at the project site were unstable and subject to soil movement under pressure....

(R4, tab 19 at 7) She noted that Mr. Hartley called the area a "mudflat" (*id.* at 8).

119. CCI and West had considerable difficulties procuring barges, cranes and some equipment (R4, tab 16 at 14, tabs 48, 51 at 1, tabs 52, 55, 56, 58, 64, 65 at 2, tab 77; ex. A-163 at 143973; tr. 1/93-95, 3/14-20, 63).

120. On 2 October 2009 Mr. West notified Mr. Burke and the COR of an alleged unanticipated need to install wick drains (R4, tab 80 at 1). Mr. West acknowledged that using wick drains to consolidate fill was common, although he had not used them in Alaska. He had a “gut feeling” they would be necessary (tr. 3/53). During his direct testimony Mr. Hartley, who was not involved in the original project design, stated that he had recommended that wick drains be installed for soil strengthening based upon his review of the AR and the unstable site conditions (tr. 4/65, 67-68).

121. Mr. Hartley returned to the site in October 2009 with more sophisticated vane shear equipment that would yield more accurate values. He left at the end of October. His investigation pertained to the crane pad and open cell design. (Tr. 4/60-64, 69) As of 8 October 2009 CCI was again rebuilding the crane pad. On 11 and 12 October 2009 Mr. Hartley performed field shear strength tests at low tide. (App. supp. R4, tab S-8 at 10/8/09 QCR at 2, 10/11, 10/12/09 QCRs at 1)

122. Barges, tugs and cranes arrived on about 18 October, and 1 and 13 November 2009 (*see* R4, tab 420 at 29370, 29371; app. supp. R4, tab S-8 at 10/18/09 QCR, tab S-9 at 11/1, 11/13, and 11/15/09 QCRs).

123. On 3 November 2009 GRS’ on site Iraqi engineer reported to the COR that there had been a “big subsidence shear failure (earth collapse)” between the north and south cells (ex. A-189 at 5899; tr. 10/156). The 3 November 2009 QCR reported that the “crack and settlement on the beach a day earlier turned into a significant slide of the beach” (app. supp. R4, tab S-9 at 11/3/09 QCR at 1).

124. On 5 November 2009 Mr. Smithson asserted changed conditions to the CO based upon “a catastrophic failure of the beach fill” (R4, tab 93 at 1). He disputed prior Corps contentions that fill rate, compaction, and moisture content had contributed to failures and alleged that the ERDC report had stated, based upon the AR, that a stable 3m fill could be placed, but CCI’s failed fill never reached 3m. He stated that the 2 November 2009 failure occurred when the fill was at about 2m. (Tr. 5/147-48)

125. On 18 November 2009 CCI asked the CO for financial relief and for about \$3M for steel and cargo costs to build north and south open cells on the basis that differing/changed conditions made it impossible to proceed with its original seawall design. She responded that her REA determination was unchanged. Although noting that CCI was over 57 days past the construction completion date, she agreed to a 2-week billing cycle and partial release and reduction of retainage. (R4, tabs 89, 90)

126. CCI hired John Snelgrove on 2 November 2009 to lead its project efforts when Mr. Smithson was unavailable. Messrs. Smithson, Snelgrove and PND were critical of PCI. (R4, tabs 416-17, 419; tr. 1/134-35; *see also* R4, tab 420 at 29369) (“PCI

has no clue about any of it as history has shown”.... “I agree with that, they obviously are not dirt movers, or contractors as far as that goes”). However, Mr. West thought PCI “had a good grip on the mechanics of running a construction job” (tr. 3/79).

127. Mr. Burke was asked to leave CCI because the project caused parent BBNC significant financial strain; he left in December 2009. That month CCI also terminated PCI’s contract and assumed West’s contract. (Tr. 1/50, 104, 3/77-78, 5/194-95)

128. It seems undisputed that CCI completed the project by an extended June 2010 due date. In April 2011 it was nominated by the Associated General Contractors of America for International Construction Project of the Year and won (tr. 3/38).

129. CCI submitted a certified CDA claim dated 8 February 2010 to the CO for \$35,125,036 and a contract extension to 30 June 2010 and asked that its interim performance rating be changed from unsatisfactory to satisfactory. The CO received the claim on 26 February 2010. (R4, tabs 2, 16) CCI incorporated its REA and added a Type I differing site conditions contention, to which it narrowed its claim at the hearing (R4, tab 16 at 1 n.1, 27-34; tr. 6/31). CCI claimed that it never received notice that the soils under the crane pad could not support the heavy equipment indispensable to driving sheet pile. Rather, the AR had indicated that the top 2m of soil was consistent with medium to stiff soils. Also, CCI had had limited site access prior to its proposal and no chance, or need, based upon the Corps’ representations, to conduct a detailed pre-proposal technical analysis. CCI contended that its post-award geotechnical analyses were not to confirm the AR’s findings and whether the top 3m of soil were stable enough to support heavy equipment, but to confirm the depths to which sheet pile must be driven. CCI contended that all claimed costs would have been avoided if the Corps had performed a timely, reasonable geotechnical investigation, rather than instructing potential contractors to rely upon an outdated, inaccurate AR. It asserted that, during design, PND had properly focused upon the location of the sheet piles rather than the access road. CCI stated that considerable attention was mistakenly focused upon dredge ponds as responsible for “causing weak soils to become even weaker” (R4, tab 16 at 6), but it still alleged that dredging was “the root cause” of the problems (*id.* at 24). In support of its claim, CCI relied upon Mr. Hartley’s 4 February 2010 expert report, below.

130. CCI’s claim and incorporated REA did not allege that the government had acted in bad faith or to deprive CCI of its contract value, and did not include operative facts that were in any respect tantamount to a bad faith claim. It also did not allege contract breach, although CCI averred in its complaint that its claim had so alleged (compl. ¶ 73).

131. A new CO was appointed in March-April 2010. By final decision of 9 July 2010 she denied CCI’s claim. On 6 August 2010 it timely appealed to the Board. CCI

ultimately increased its claim to \$40,064,759. (R4, tab 2; ex. A-232 at 1, ex. A-233 at 1, ex. A-259 at 16, ex. A-260 at 208, ex. G-18 at 3; tr. 5/157, 6/254)

Appellant's Expert Hartley's Direct Evidence

132. Mr. Hartley has a master's degree in geotechnical engineering and is a licensed civil engineer. He was admitted without objection as an expert in civil and geotechnical engineering. He is very familiar with open cell projects and, prior to the one at issue, had done geotechnical assessments for them. (Tr. 4/9, 13, 15-16) He prepared an expert report dated 4 February 2010 in response to the Corps' rejection of CCI's REA (ex. A-214 at 1). It reflects counsels' input and contains legal conclusions that we do not accept as expert evidence, as is true of any legal conclusions by other experts in this appeal. Mr. Hartley's report acknowledged that "[w]e have not discussed with the Contractor the interpretation procedures they used in the evaluation of construction means and methods for the project" (*id.* at 3). No reason is given for this omission. His report merely assumed, without attribution, that CCI relied upon the AR's subsurface information in submitting its proposal.

133. Among other things, Mr. Hartley opined that the AR contained conflicting information on soil strength and inaccurate data reporting, including discrepancies between soil consistency descriptions and blow counts. He stated that the reported data, interpreted logically, would lead a contractor to believe that a shore-based fill operation could be achieved with some containment from armor, cells, geotextile wraps, super sacks and other means. (Ex. A-214 at 3)

134. Mr. Hartley cited Corps guidelines for geotechnical reports and interpretation of field blow count data obtained in an SPT for the proposition that adjustments should be made to raw field blow counts to provide a normalized data set prior to determining soil consistency and properties. After applying such "corrections" to the AR blow counts, PND determined that the silty clay encountered from the surface to a depth of 6.5m in BH No. 2 was a medium silty clay rather than a very soft to soft silty clay and the silty clay from the surface to a depth of 3.5m in BH No. 3 was a stiff silty clay rather than a very soft to soft silty clay. The Basra report's BH No. 2 indicated that clayey silt ranged from very soft to stiff. Mr. Hartley reported that PND's October 2009 field vane shear testing yielded strength measurements that were, on average, half the value of the AR's laboratory vane shear strength tests. However, soil conditions, based upon split spoon blow counts, appeared to result in shear strengths 2 to 6 times higher than the AR's laboratory vane shear strengths and indicated that the shear strength was much higher than values in the ERDC report. Mr. Hartley denied that his description of the project area as a "mudflat" implied that it was obviously unstable and stated that PND had constructed many fill and armor rock projects on riverine and marine mudflats using shore-side construction techniques similar to those used by CCI. (Ex. A-214 at 5, 10, 13)

135. Mr. Hartley stated that unconsolidated silts and clays from dredging were deposited along the project, yielding very low shear strengths in the upper silt/clay formation. While the USAID report indicated that some dredge side casting had occurred near the Old Port, it had not given enough information to analyze quantities, locations, or site and construction impact. He concluded that it was hard to ascertain actual geological site conditions from the AR due to its conflicting statements, data reported, and lack of data that a prudent geological engineer would normally include. (Ex. A-214 at 13-16)

136. At the hearing Mr. Hartley opined that PND's recommendations for crane pad stabilization should have worked based upon the AR. Regardless of whether one used the AR's laboratory vane shears or the blow count calculated vane shears, they were substantially higher than field conditions. Shear strength was much lower than anything described in the AR. PCI did not follow all of PND's recommendations but, according to Mr. Hartley, even if it had, the crane pad would not have stabilized. (Tr. 4/40-41, 105)

137. Mr. Hartley first testified that, based upon the AR, wick drains might or might not have been called for in the original project design; either way was appropriate (tr. 4/68-69). He later testified that they were due to the differing site conditions and the need to change to marine-side construction (tr. 4/119-21).

138. In Mr. Hartley's opinion, field testing data typically provides a more accurate picture of soil conditions than lab testing data, because when a sample is transported there is a potential for disturbance and there is such a potential with very soft or soft soils when Shelby tubes used in laboratory vane shear testing are cut into sections. He noted:

[E]ven in the [AR] they indicated that they had problems taking the sample, extruding the sample out of the Shelby tube. *And that's because they were having issues with soft material.* [Emphasis added]

(Tr. 4/73)

139. When asked if descriptors were superior to or subordinate to blow counts in interpreting BH data, Mr. Hartley responded: "It's really another piece of information that's provided" (tr. 4/88). He added that there was a fairly large discrepancy in the AR data between the blow counts in the upper 7m of soil and the descriptors and, in that case, considering sample transportation and laboratory work, the blow counts would better describe soil consistency at the site (tr. 4/88-89).

140. Apparently using AR blow counts adjusted as he earlier described, Mr. Hartley concluded that the soil should have been stable enough to support a crane pad

and land-based construction. He opined that, based upon the ERDC report, and his own analysis, an unreinforced crane pad should have been stable at up to 3m of fill height. (Ex. A-214 at last pg.; tr. 4/89- 93, 96-98, 100, 105, 108)

Appellant's Expert Enamul Hoque's Direct Evidence

141. Enamul Hoque, president of Hoque & Associates, Inc. of Phoenix, Arizona, has a master's degree in civil engineering. He is a licensed civil engineer with extensive experience in geotechnical engineering, having completed thousands of geotechnical investigations, including of slope failures. He was admitted without objection as a civil engineering and geotechnical expert. (Ex. A-236; tr. 5/6-10) He supplied an expert report dated 3 September 2010 (ex. A-225).

142. Mr. Hoque did not read the entire RFP or the contract. He focused upon the AR and USAID reports and the answers to questions 11 and 42. He was not present during the crane pad failures but relied upon what CCI told him concerning pad composition, fill height and crane placement. Mr. Hoque arrived on site on 22 February 2010 and was there for several weeks. Most of his testing was outside the project so that it covered undisturbed areas. He opined that he could about replicate conditions at the time of failure because, based upon his observations and testing, there was a monotonous geology that did not change much--an upper soft soil and competent soil below. He performed dilatancy testing by holding soil in his hands in the field. It was falling through his fingers, meaning it was very soft and not as depicted in the AR blow counts in his opinion. (Ex. A-225 at 1; tr. 5/11-13, 18, 20, 30-31, 34-35, 60-61, 76, 83, 87-90)

143. Mr. Hoque stated that the moisture content at which a soil starts behaving as a liquid is the "liquid limit" (LL). If that content is at or above LL, the soil will behave like a viscous fluid. Regarding BH No. 2, the AR's "Summary of Test Results," at sample Nos. 1 and 3, reported the LL at 48% and 51%. Mr. Hoque found the moisture content in the field to be about 47% up to 70%, essentially liquid. He concluded that, if the AR's reported moisture content on those two samples were correct, then they had lost moisture during sampling, transportation and handling. He opined that the reported LLs and blow counts indicated that the soil should have supported minor construction and most of the equipment. He opined that the cohesion values under the "Summary of Test Results" for sample Nos. 2 and 4 indicated that the soil would support equipment under virtually all conditions, but cohesion tests in Phoenix yielded much smaller numbers. To him, the AR was, at best, confusing and did not represent actual soil conditions; strength values were totally different. (AR at next to last pg.; ex. A-225 at 2-3; tr. 5/37-42, 62, 76)

144. Mr. Hoque opined that the AR excluded vital silt data and that the silt was "abundantly available" at and/or below the surface throughout the site (ex. A-225 at 4).

145. In Mr. Hoque's opinion, geotechnical engineers would not make recommendations concerning geotechnical design parameters associated with crane pad construction and placement of a 280-ton crane on top of it, for a site with competent, stiff to hard soil. They would do so when there was soft saturated soil, even if there were a much smaller crane. Placement of a 6m high fill 100m into the shore would require a stiff to very stiff soil. (Tr. 5/81-83, 85)

146. Mr. Hoque would rely upon blow counts as the most reliable representation of site conditions and would rely more upon field testing than laboratory testing. In his opinion, based upon the AR's blow counts, there should not have been a failure where the crane pad was attempted. (Tr. 5/24-26)

147. Part of Mr. Hoque's work was field observation of surficial geologic site conditions using indicator tests described in the ASTM "Field Identification and Classification of Soils." Visual soils classification is a recognized and standardized technique. He acknowledged that his visual classification of the soils as elastic silt differed from his laboratory's classification of it as clay. Despite his testimony that he would rely more upon field testing, on cross-examination he stated that he deemed visual classification to be an indicator and laboratory classification to be more precise. In his opinion, while blow counts were the most reliable factor, visual and laboratory classifications should also be considered and visual classification should not be discounted. One should look at everything. (Ex. A-225 at 1; tr. 5/48-54, 100-01)

Appellant's Expert Tracy J. Lyman's Direct Evidence

148. Tracy J. Lyman, senior consultant at Brierley Associates in Denver, Colorado, submitted an expert report dated 3 January 2011 (ex. A-234; tr. 6/21). He held a master's of engineering degree, focusing upon rock and soil engineering, and had been a geotechnical engineer for 39 years. He held licenses as a professional engineer and geologist. (Tr. 6/5-7) Although the presiding judge sustained the government's objection to CCI's request to admit Mr. Lyman as an expert in design-build contracts and the evaluation of bid documents from a reasonable contractor's perspective, he was admitted without objection as an expert in geotechnical and soil engineering (tr. 6/12-14).

149. Mr. Lyman reported that the actual shear strength of the soil was about half of that expected based upon the AR and Basra reports. He stated that there might have been some variability across the Pier 1 area, with weaker soils at the crane access road location than at the site of the Basra report's boring 2. He described the ERDC report as concluding, using the AR's most conservative assumptions, that a 3m thick crane access roadway fill would be stable, but CCI's experience was starkly different and there was significantly lower strength in the subsurface soils at the roadway than what was anticipated based upon the AR and Basra reports. (Ex. A-234 at 8-10; tr. 6/53-56)

150. The Lyman report concluded that the dredging activities in close project proximity “most likely produced a thin veneer of highly saturated, unconsolidated, very weak soils at and seaward of the intertidal zone ‘ground surface’” and that those soils might have exacerbated crane access road instability (ex. A-234 at 8-9). The dredge spoils “exhibited ‘zero’ undrained shear strength” (*id.* at 10).

151. Mr. Lyman concentrated on AR BH Nos. 2 and 3, in the intertidal zone, because No. 1, up on the land, was not relevant. No. 2 was at the location of the temporary causeway to be constructed for the crane. In evaluating the BH data he looked primarily at SPT results, the “N” values. Blow counts are indicative of clay consistency, for which there is a rigorous industry description system. Blows from an SPT test of 0 up to 2 indicate very soft clay; 2 to 4, soft; 4 to 8, medium; 8 to 15, stiff; 15 to 30, very stiff and greater than 30, hard. He opined that the AR’s BH log descriptors, which were based upon visual classification, did not comport with the rigorous industry system and described softer material than the blow counts indicated. He did not agree with the AR’s characterization of the clay as very soft. (AR, app’x A, B; tr. 6/33-37, 39, 45, 70, 76)

152. Mr. Lyman found nothing in the Basra report to indicate that a contractor should change from land-based construction. He concluded that a blow count of 2 from Basra BH No. 2, at a depth of 9.5m “was anomalously low” when compared to blow counts from AR BH Nos. 2 and 3. (Ex. A-234 at 7; tr. 6/45-46, 86, 141-43)

153. Mr. Lyman considered an acceptable FOS for crane pad stability, once a human-operated crane were placed upon it and it was operating under a load, to range from 1.1 to 1.3. The ERDC report's FOS for a 3m high crane pad was 1.07. Rounding that to 1.1, he opined that a contractor could consider placing a human-operated 280-ton crane onto a crane pad along a shoreline under the conditions the ERDC report described but should not go to any lower safety level. Also, he would look for ways to increase stability. (R4, tab 108 at 5, table 3; tr. 6/116-18, 120)

154. Mr. Lyman never visited the project site nor spoke to anyone who was on site when construction was initiated. He did not see any 2008 project design calculations on behalf of CCI. He did not find any design document related directly to the crane pad, but opined that, because it was temporary, a design was not required and would be unusual. (Tr. 6/68, 78-79, 81, 91, 104, 144, 147)

155. Mr. Lyman was not expert in dredging or sediment transportation but read the USAID report to indicate that, on the project side of the river, erosion would occur and, on the other side, sediment deposition would occur (tr. 6/68, 146).

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6.2.6 [PND's] vane tests...gave values of undrained strength that are below the range of values indicated by Andrea and University of Basra.... [T]he results are not out of general character with the Andrea and Basra results, and all the results are commensurate with the descriptions used in the two reports for the upper stratum being a very soft clay.

160. Dr. Apted concluded, *inter alia*, that one reasonably could have foreseen from the AR that the stratum underlying the site along the foreshore was likely to be very soft or soft clay; it should have been clear that the AR was limited in extent and quality and there was a risk of more difficult conditions; and the USAID report conveyed the significant risk of accumulation of silt and clay from dredging (ex. G-16 at 23-24). Dr. Apted's overall strong impression from the AR was that one should expect "pretty weak", very soft, soft-to-medium clay (tr. 13/141).

162. Dr. Apted opined that, regardless that the crane pad was temporary, it had to be designed appropriately; it was key. He opined that the earthworks' failure was consistent with the ground conditions that could have been expected and with the overloading of a layer of very soft clay (ex. G-16 at 26; tr. 13/176-77). He concluded:

- 6.2.2 While the actual undrained strength that could have been identified from the [AR] may not have been as low as allegedly found by the vane probing carried out on behalf of CCI, it was sufficiently low to highlight the risks of instability of constructing earthworks on the foreshore.

...

- 6.2.5 I consider that the instability that did occur may have occurred in any case because of the presence of very soft clay, even if the undrained strength was in the range of 10 to 20 kPa.

(Ex. G-16 at 28)

Mr. Hartley's Rebuttal Evidence

163. In rebuttal to Dr. Apted, Mr. Hartley prepared a "Slope Stability Analysis Summary" evaluating FOS'. An FOS of 1 or more represents stability; less than 1, instability. (Ex. A-249 at n.1, at 2, conclusion 3; tr. 4/26-27, 108, 123, 126-28) Based upon failure at 25m from the shoreline at no more than 2.5m of fill thickness, Mr. Hartley's data showed "conditions were much, much worse than what the [AR] was showing, even at the very most conservative value in the [AR]" (tr. 4/128-29).

Mr. Hoque's Rebuttal Evidence

164. Among other things, in his 27 January 2012 rebuttal report, Mr. Hoque asserted that there was no indication that Dr. Apted tried to evaluate the soil's index properties visually and classify it using standardized ASTM procedures (ex. A-241 at 2).

165. Mr. Hoque stated that the AR did not mention anything about the soft soil's effect on foundation performance or construction. He faulted it for not addressing backfill in a marine environment and its complexity, on-site geology, site characteristics or past usage that could affect design and construction. He stated that there was no reference to saturated very soft and viscous soils at the site in the documents he reviewed but such soil was "abundantly available at the surface and/or below the surface throughout the site" (ex. A-241 at 7). He concluded that near surface soils and their conditions at the site were materially different than reported in the AR and Apted report and that his own findings directly conflicted with the AR, especially in the identification of silt and its strength values. (*Id.* at 2, 5-7)

Dr. Apted's Expert Rebuttal and Supplementary Reports

166. Dr. Apted prepared an expert report dated February 2012, in rebuttal to Mr. Lyman's 3 January 2011 report, Mr. Hoque's 3 September 2010 report, and Mr. Hartley's expert evaluations (ex. G-19). Dr. Apted concluded, among other things, that there was enough information in the AR and USAID report:

2.2.9 ...[T]o highlight a significant risk of very soft ground occurring below the foreshore, to the extent that unconstrained construction of earthworks over the foreshore would have been at risk of failure and disruption.

(Ex. G-19 at 6) He opined that, using a range of FOS that could reasonably be expected when placing fill over the foreshore, the results clearly demonstrated that earthworks failure could be expected well short of the seawall construction area (*id.* at 14).

167. Dr. Apted prepared a supplemental report dated April 2012, after reviewing CCI depositions and exhibits and concluding that the fill used, except in the open cells, was general and not selected for its suitability to be placed in or near water (ex. G-23 at 1, 4-5, 10). Upon review of project information, including manner of fill placement, tide level, and some heavy rainfall, he concluded that, based upon his experience, it was more likely than not that a water table was established within the fill somewhere between the mid and high tide levels. His prior analyses had assumed, conservatively, that the fill was entirely dry. He concluded that, while not large, a water table within the fill would reduce the FOS by 5 to 10% and the likelihood of slope failure in light of CCI's method of operation was even more readily apparent than in his prior analysis. (*Id.* at 5-7, 9-10)

DISCUSSION

I. The Board Lacks Jurisdiction to Entertain Appellant's Bad Faith Contentions

CCI contends in briefing that the government acted in bad faith in denying its REA and in other respects and seeks its attorney fees and costs in pursuing its claim and appeal, in an unspecified amount.⁴ Although the government asserted that this was the first time

⁴ CCI cites *St. Paul Fire & Marine Ins. Co. v. United States*, 4 Cl. Ct. 762 (1984), for the proposition that it can recover attorney fees and costs due to the government's alleged bad faith actions. However, in that case, which involved an award of attorney fees and costs to the government due to the plaintiff's prosecution of its action in bad faith, the court confirmed that monetary awards can be imposed on the United States only when there has been an express waiver of sovereign

CCI had so contended, it responded to its allegations on the merits and did not move to dismiss them for lack of jurisdiction. However, it is incumbent upon the Board to assure that we have jurisdiction, even if the parties have not raised the issue. *See Bender v. Williamsport Area School District*, 475 U.S. 534, 541, 546-47 (1986). Accordingly, we gave the parties the opportunity to brief the jurisdictional question. The government asserts that CCI never submitted a claim to the CO that it acted in bad faith. CCI counters, *inter alia*, that it challenged the propriety of the government's conduct in its REA and claim and that its bad faith allegations are based upon the same operative facts that it has advanced since the inception of the case.

A contractor's submission of a proper CDA claim in writing to the CO for decision is one of the prerequisites to the Board's CDA jurisdiction. 41 U.S.C. § 7103; *Madison Lawrence, Inc.*, ASBCA No. 56551, 09-2 BCA ¶ 34,235 at 169,206. The Board does not have jurisdiction to consider a new claim raised for the first time in a party's pleadings. *American General Trading & Contracting, WLL*, ASBCA No. 56758, 12-1 BCA ¶ 34,905 at 171,639. As we recently summarized:

Whether a claim before the Board is new or essentially the same as that presented to the CO depends upon whether the claims derive from common or related operative facts. The assertion of a new legal theory of recovery, when based upon the same operative facts as the original claim, does not constitute a new claim. *Dawkins General Contractors & Supply, Inc.*, ASBCA No. 48535, 03-2 BCA ¶ 32,305 at 159,844. In determining a claim's scope, we are not limited to the claim document but can examine the totality of the circumstances. *Versar, Inc.*, ASBCA No. 56857, 10-1 BCA ¶ 34,437 at 169,957.

However, the contractor must submit a clear and unequivocal statement that gives the CO adequate notice of the basis and amount of the claim. *Contract Cleaning Maintenance, Inc. v. United States*, 811 F.2d 586, 592 (Fed. Cir. 1987).

Shaw Environmental, Inc., ASBCA No. 57237, 12-1 BCA ¶ 34,956 at 171,844.

immunity. *Id.* at 766. In Board appeals recovery of attorney fees and costs from the government is governed by the Equal Access to Justice Act. 5 U.S.C. § 504. *Rig Masters, Inc.*, ASBCA No. 52891, 01-2 BCA ¶ 31,468.

To overcome the presumption that government officials act in good faith, CCI must prove by clear and convincing evidence that a government official acted with specific intent to injure it. *Road and Highway Builders, LLC v. United States*, 702 F.3d 1365, 1368-69 (Fed. Cir. 2012); *Am-Pro Protective Agency v. United States*, 281 F.3d 1234, 1239-40 (Fed. Cir. 2002); *Bruce E. Zoeller*, ASBCA No. 56578, 13 BCA ¶ 35,353 at 173,518. The court of appeals recently discussed governmental breach of the duty of good faith and fair dealing in terms of acts or omissions that, while not expressly proscribed by the contract, are inconsistent with the contract's purpose and deprive the other party of the contemplated value. *Metcalf Construction Co. v. United States*, 2014 U.S. App. LEXIS 2515 at *14 (Fed. Cir. 2014). CCI's claim, including the incorporated REA, did not allege that the government had acted in bad faith in any respect, or had acted with specific intent to injure CCI or to deprive CCI of its contract value, and it did not include operative facts that were in any respect tantamount to a bad faith claim (finding 130).

In sum, we lack jurisdiction to entertain CCI's bad faith allegations because it did not submit such a claim to the CO for decision.⁵

II. Appellant's Motions to Exclude or Strike

CCI moved pre-hearing to exclude Dr. Apted's expert report and related testimony to the extent they contained legal conclusions and addressed American construction projects, Corps-administered projects, United States' construction contract requirements, or the FAR (app. mot. at 7). The Board reserved its ruling for the hearing, where CCI stated that Dr. Apted should not be allowed to testify about other than his technical interpretation of the AR. The government opposed the motion, citing Dr. Apted's broad experience and expertise in geotechnical engineering, and stated that he would not offer legal conclusions. (Tr. 13/6-8) The presiding judge denied CCI's motion, noting that its own expert reports could be interpreted to advance legal conclusions. The judge stated that she would evaluate all of the reports for their geotechnical information and would not rely upon them for any legal conclusions. (Tr. 13/9)

During Dr. Apted's testimony, CCI objected that some of the government's questions concerning fill placement were beyond the scope of his expert qualifications and reports. The government disagreed. The judge allowed the examination over CCI's objection, but instructed that the focus be upon soil conditions rather than construction

⁵ CCI addressed its interim performance rating only briefly at the hearing. It alleged in briefing that the government gave it "an improperly issued and facially unsupported interim performance evaluation" (app. br. at 57) but did not mention its request for a rating change or brief the jurisdictional and other issues involved. Accordingly, we deem the claim's rating change request to have been abandoned.

methods and stated that CCI could reserve its objection in post-hearing briefing if it so chose. (Tr. 13/223-27) In a footnote in its reply brief, in essence a motion to strike, CCI renewed its objection to Dr. Apted's testimony concerning its means and methods of construction on the grounds that it was outside his area of expertise, patently prejudicial, and raised to cloud the issues before the Board (reply br. at 41 n.3).

Regarding each expert's report and testimony, the Board has considered only evidence that is within the expert's accepted area of expertise, and not matters that are irrelevant to the differing site conditions claim at hand or in effect legal conclusions, which are not within an expert's province. *Lear Siegler Services, Inc.*, ASBCA No. 57264, 12-2 BCA ¶ 35,112 at 172,425.

Accordingly, CCI's motions to exclude and strike are denied except as reflected in the foregoing ruling.

III. Appellant Has Not Proved A Type I Differing Site Condition

Appellant must prove the following to establish a Type I differing site condition:

- (1) the contract contained positive indications of the conditions at the site; (2) it reasonably interpreted and relied upon the indicated site conditions; (3) the conditions encountered were materially different from those indicated; (4) the conditions encountered were reasonably unforeseeable based upon all the information available at the time of bidding; and (5) its injury was caused solely by the differing site condition.

Nova Group, Inc., ASBCA No. 55408, 10-2 BCA ¶ 34,533 at 170,321. For various iterations of these criteria, see *International Technology Corp. v. Winter*, 523 F.3d 1341, 1348-49 (Fed. Cir. 2008); *H.B. Mac, Inc. v. United States*, 153 F.3d 1338, 1345 (Fed. Cir. 1998); *Stuyvesant Dredging Co. v. United States*, 834 F.2d 1576, 1581 (Fed. Cir. 1987); *P.J. Maffei Building Wrecking Corp. v. United States*, 732 F.2d 913, 916 (Fed. Cir. 1984).

(1) The Contract Contained Some Indications of Site Conditions

CCI and its experts have faulted the 2007 Andrea and 2003 USAID reports contained in the contract's incorporated RFP for their lack of or limited site condition information (findings 23, 30, 42, 54, 58, 78, 135, 144, 165). Nonetheless, the RFP contained some indications of site conditions. While said to be "for information only" (finding 6), the AR described subsoils at the project site and included three BH logs, two of which are relevant (findings 8, 9, 10). Borings are the most significant indication of

subsurface conditions. *Nova Group*, 10-2 BCA ¶ 34,533 at 170,322, *accord Optimum Services, Inc.*, ASBCA No. 57575, 13 BCA ¶ 35,412 at 173,720. The “information only” disclaimer does not shift the risk to CCI that the information might prove to be inaccurate. *Metcalf Construction Co.*, 2014 U.S. App. LEXIS 2515 at *29. Moreover, in response to Question 11 posed by potential offerors, the government stated that the best soil investigation data available to it was in the AR and offerors should assume that its data was representative of the site. In response to Question 42, it stated that they should assume the three AR borings were representative of the entire site for the purposes of developing a proposal, but that additional geotechnical information might be required during project design. (Finding 25)

The RFP also had information about sedimentation near the site (finding 12). The USAID report, said to be “for information only” (finding 25), contained information about site geology, shoaling patterns, and dredging and disposal practices (findings 26-28).

(2)(a) Any Absolute Reliance upon the Andrea and USAID Reports
Would be Unreasonable

Any absolute reliance upon the AR and USAID reports would be unreasonable. This was a design/build contract. Regardless of the lack of weight of the disclaimers that the AR and USAID reports were for “information only,” the RFP and contract provided that site specific geotechnical information necessary to design and construct the project was the contractor’s responsibility (finding 6). Thus, CCI was on notice that it had some responsibility for ascertaining the geological conditions that would affect the project. However, CCI conducted only a minimal pre-proposal site visit with no follow-up pre-proposal investigations; it disregarded the warnings and advice of its consultant, Mr. Dyer, that, among other things, project site conditions had not been addressed and its proposal price was much too low; and it proceeded to enter into the contract because it wanted its “foot in the door” in the Middle East in order to secure other business (findings 15, 17, 18, 21, 35, 37, 38, 52).

(2)(b) CCI Has Not Proved that it Relied upon the Indicated Conditions

The Andrea report had supported a preliminary design analysis by Weston in 2007 for an L&T pier system. When the AR was included in the RFP, the RFP contemplated a traditional L&T pier construction, not CCI’s open cell design (*see* findings 20, 21, 48). Regardless of the AR’s suitability for a land-based open cell pier design, there is no persuasive evidence that CCI relied upon it or the USAID report in preparing its proposal. Prior to contract award Mr. Nottingham did most of the work on behalf of PND (finding 22). He testified that CCI relied upon the answers to Questions 11 and 42 because they were the only things available and it was instructed to do so (finding 30). In support of its

reliance contentions, CCI alleges that it was responsible, at Mr. Nottingham's request, for posing those questions (app. br. at 75; app. reply br. at 10). However, while the answers to Questions 11 and 42 indeed made statements concerning the AR's representation of site conditions, none of the questions posed on behalf of CCI pertained to geographic site conditions and at least Question 42 is attributable to Weston (findings 21, 24).

Mr. Nottingham testified that he looked at the AR's three borings in helping to prepare CCI's proposal and relied upon their blow counts, but then acknowledged that their data was insufficient to determine whether the project could be constructed from the land side. He saw inconsistencies between descriptors that the soils were very soft and blow count data that indicated "not a bad" or a "pretty good" soil (finding 23). He noted to CCI that the BH were in one location and advised that it seek more information, recognizing that the general information could not be used in any detail. He designed a one-page concept plan that was incorporated into CCI's proposal but CCI has not rebutted the Corps' assertion that the soil conditions and profile shown on his plan did not correspond to the AR data in the RFP. His concept plan, along with a generic cost estimate he made, did not discuss the AR or USAID report or detail any means or methods of construction, such as the crane and crane pad at issue. (Findings 22, 23, 30)

CCI has not directed us to any written statement or analysis by Mr. Nottingham, or anyone from PND, CCI, or PCI, at the time CCI submitted its proposals, of project site conditions that would allow land-based construction, or any contemporaneous written expression of reliance by CCI upon the AR or USAID reports. CCI's proposals did not contain a defined construction plan concerning the earthworks and filling operations or any statement of assumed ground or soil conditions. In fact, CCI did not perform any geological testing of the site prior to contract award and recognized that it lacked soils data. (Findings 35, 58)

Tellingly, for months, continuing through its REA, CCI blamed its pad failures upon dredging and dredge spoils ponds, not upon any alleged misplaced reliance upon the AR or USAID report (findings 75, 77, 80, 83, 86, 88, 93, 94, 96, 98, 101, 104, 105, 109, 111). In its claim CCI still alleged that dredging was "the root cause" of the project problems (finding 129). In his 4 February 2010 expert report, Mr. Hartley still raised dredging issues as contributing to the soil conditions encountered (finding 135).

Mr. Hartley, a PND principal, was not involved at the proposal stage and Mr. Nottingham did not consult him (finding 32). His 4 February 2010 expert report acknowledged that "[w]e have not discussed with the Contractor the interpretation procedures they used in the evaluation of construction means and methods for the project" (finding 132). No reason was given for this omission. His report merely assumed reliance without any stated basis for the assumption.

Significantly, PCI's principal, Mr. Nunn, testified credibly that, in the proposal planning meetings, the AR was not the basis of any of the project constructability discussions (finding 31).

For the foregoing reasons, CCI has not satisfied the reliance requirement necessary to support a Type I differing site conditions claim.

(2)(c) Even if CCI Relied upon Indicated Site Conditions, it
Did Not Interpret them Reasonably

Assuming, *arguendo*, that CCI relied upon the AR and USAID reports at the proposal stage, it did not interpret the indicated site conditions reasonably. From our own review and the parties' expert evidence, there were many indications that soft, weak soil conditions could be encountered, as summarized in section (4) below.

Moreover, even CCI's experts found the AR to be inconsistent and incomplete. Mr. Hartley opined that it contained conflicting information on soil strength and that it was hard to ascertain actual geological site conditions from the AR due to the conflicts and lack of data that a prudent geological engineer would include. (Findings 133, 135, 139) Mr. Hoque found the AR to be confusing and opined that it did not contain information necessary for design and construction (findings 143, 165). Mr. Lyman noted that the BH logs described softer material than the blow counts indicated (finding 151).

Dr. Apted reported that the AR's relatively high SPT N values were anomalous and indicated a higher undrained soil strength, unsupported by the BH log descriptions or the AR's reported vane strengths. He concluded that it should have been clear that the AR was limited in extent and quality and there was a risk of more difficult conditions. (Findings 159, 160, 166)

Thus, the Andrea report was contradictory on its face and did not have necessary design and construction information.

(3) The Conditions Encountered were Not Materially Different from those Indicated

In addition to the repeated crane pad material failures, post-award conditions included: (1) Gunderboom's assessment of geotechnical problems apparent from the outset, including that a vessel was stuck in the muck in the middle of the job site, and dredging operations that might have deposited fine silt at the site for many years (finding 109); (2) the National Lab's boring showing 2m of fill and 9m under it of very soft to soft clay (finding 110); (3) the "mudflat" and dredging deposits observed by expert Hartley (findings 105, 135); (4) the post-award Basra BH 2 that indicated a clayey silt ranging from very soft to stiff (findings 59, 60, 134); (5) expert Hoque's observation of a

monotonous geology with an upper soft soil and competent soil below; his field testing by holding soil in his hands, which fell through his fingers, meaning it was very soft; and his observation that silt was abundant at and/or below the surface throughout the site (findings 142, 144); (6) PND's January 2009 pre-construction report's description of the clays' design soil properties as very soft and expert Lyman's acknowledgement that this is what was encountered (findings 58, 156); and (7) expert Apted's observations of a slippery, sheeny, silty clay surface or mud, in which he got bogged down, and his rebar testing, indicating very soft soil conditions, which were readily apparent, along with a brown river laden with sediment (finding 158).

Thus, site conditions were not materially different than indicated in the contract.

(4) The Conditions Encountered were Not Reasonably Unforeseeable Based upon All the Information Available at the Time of Proposals

The RFP stated that offerors were expected to inspect the work site. Under the design/build contract, CCI was responsible for ascertaining conditions that could affect the work, including tides, ground conditions, surface and subsurface conditions reasonably ascertainable from a site inspection, the government's exploratory work, and the contract. It was to research all existing conditions at the naval base and waterway. Site specific geotechnical information necessary to design and construct the project and geotechnical related items were CCI's responsibility and it was to determine the geotechnical conditions by field and laboratory investigations. (Findings 2, 4-6)

No one from CCI, PCI or PND attended the site visit. One SAR engineer attended. SAR did not have nearshore marine construction experience. We have not been directed to any evidence that the SAR engineer evaluated ground conditions or the suitability of the site for land-based construction. The site visit was at high tide, reducing its scope, but none of the questions the engineer posed pertained to geographic site conditions or CCI's method of dock construction. CCI did not request a ground investigation or hire a geotechnical professional to evaluate its landside crane pad construction efforts until after slope instability occurred. (Findings 17, 21)

The RFP noted that the project site was on the west bank of a river that was an estuarine outflow of the Tigris-Euphrates delta system. A commercial port was immediately upstream and the infrastructure was based on a continuous dredged quay along the west bank. The river was heavily laden with fine sediments and a marine railway between the commercial port and the naval base was reported to have already silted in. Mr. Nunn, who was familiar with the project area due to PCI's work on a Basra airport project, knew that a dredging contractor was on site, that millions of dollars were being spent dredging the naval port, and the other piers were already clogged with siltation. (Findings 12, 13, 16, 111) Indeed, CCI's expert Lyman concluded that

dredging activities in close project proximity “most likely produced a thin veneer of highly saturated, unconsolidated, very weak soils,” which might have exacerbated crane access road instability (finding 150).

The Andrea report described the subsoil strata as consisting “mainly of a very soft, soft to medium gray to dark gray sandy silty clay” layer with organic matter and soluble salts, which overlaid a medium, dense to very dense layer of gray fine, medium to coarse grained silty sand, with little gravel (finding 8). The majority of the first top soil was a silt-sand-clay mixture. The relevant BH Nos. 2 and 3 were in an ebb and tide zone. (Findings 8, 9) The water table fluctuated and the zone immediately above it was “greatly affected,” as moisture increased, strength decreased and compressibility increased (finding 8). “The saturated soil condition below the water table [made] the problem of settlement significant” (finding 9).

The AR stated that laboratory vane shear equipment was used to obtain the undrained shear strength of the samples due to high disturbance in all samplers that extruded from shelby tubes “of the soft clayey layer, also it was found that this soil exudes between the fingers when squeezed in the fist so this could [be] described as very soft to soft sandy clayey soil” (finding 9). The undrained shear strength values were associated with very soft to soft soils. The AR stated that organic matter with salts could be found in the soil in many forms, which could significantly alter its engineering properties, and that a site investigation had produced evidence of collapse due to the reaction between the fundamental soil compounds with organic matter. The AR noted that, for construction on soft soil, the contractor could alleviate problems by replacing the soft soil, using pile foundation or stabilizing or improving the soft soil. (*Id.*)

The AR’s log for BH No. 2, very near the pad site, described the top 7m of material as very soft to soft silty clay with possible organic matter and shiny traces of soluble salts. From 7 to 12.5m the material was soft to medium gray silty clay with some silty sand pockets and shiny soluble salts. Dense to very dense materials started at 12.5m. Similarly, the BH No. 3 log described the upper 7m as very soft to soft silty clay, with pockets of fine sand, traces of organic matter and shiny soluble salts, and from 7 to 16.5m as soft silty clay with shiny soluble salts and some fine sand. Very dense material started at 6.5m, becoming loose to medium grained silty sand, with soluble salts, at 17.5m. (Findings 10, 11)

CCI’s expert Hartley recognized that the AR indicated that there were problems with extruding a sample from the Shelby tube “because they were having issues with soft material” (finding 138). Its expert Hoque acknowledged that, even if blow counts gave the most reliable data, visual classification should not be discounted (finding 147).

The USAID report noted the presence of silty sand and, suspended sediments; shoaling; dredged materials sidecast into the river channel; and a requirement for maintenance dredging (findings 26-28).

The post-award ERDC report concluded that the “very soft to soft” consistency of the foundation clays described in the AR should have served notice that dock construction and long-term performance were causes for concern; the high level of disturbance in the soil samples was a direct result of the very soft to soft clay consistency and caused significant uncertainty in determining shear strength for slope stability analysis; it was certain that the clay consistency was very soft to soft; and lack of information regarding which samples were tested in the lab vane tests or how many tests were performed increased uncertainty (finding 117).

We are also persuaded by Dr. Apted’s expert opinion that it reasonably could have been foreseen from the AR that the stratum underlying the site along the foreshore was likely to be very soft or soft clay and that there was enough information in the AR and USAID report to highlight a significant risk of very soft ground occurring below the foreshore, such that unconstrained construction of earthworks over the foreshore was at risk of failure (findings 160, 166).

(5) CCI has Not Proved that its Claimed Injury was Caused Solely by the Claimed Differing Site Conditions

CCI advocated in the quantum portion of this appeal that it had segregated those of its alleged extra costs that were not attributable to its claimed differing site conditions from those that were. The Corps disagreed. Because we do not reach quantum, we only note that even if, *arguendo*, there were differing site conditions, there are several factors undermining CCI’s contention that its claimed costs were all attributable to them.

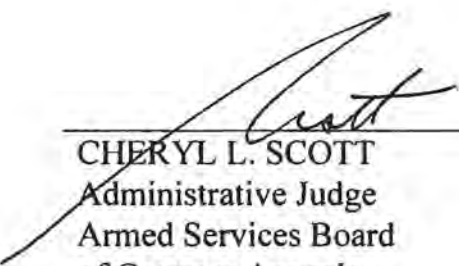
CCI claims that its proposal did not include profit or overhead (finding 38). Its consultant found profit, overhead, contingencies and cash flow deficiencies in its proposal which he assessed could easily result in a shortfall of over \$15,600,000 and create a severe risk to CCI. He reported that it did not do a project estimate or address project conditions. (Finding 37) PCI’s subcontractor Gunderboom believed it had underestimated the work and time necessary for the project and was highly critical of PCI’s performance throughout the project, including its alleged failure to understand soils issues (findings 63, 109). CCI’s Mr. Smithson was also highly critical of PCI’s project management (finding 102). CCI and West had considerable difficulties procuring barges, cranes and some equipment (finding 119). Moreover, CCI did not present required proof that all of its claimed differing site condition delays were to work on the critical path. *See Wilner v. United States*, 24 F.3d 1397, 1399 n.5, 1400-01 (Fed. Cir. 1994); *Fru-Con Construction Corp.*, ASBCA Nos. 53544, 53794, 05-1 BCA ¶ 32,936 at 163,159.

Therefore, CCI has not proved that its claimed injury was caused solely by the claimed differing site conditions.

DECISION

We deny CCI's appeal.


Dated: 14 March 2014




CHERYL L. SCOTT
Administrative Judge
Armed Services Board
of Contract Appeals

I concur

I concur




MARK N. STEMLER
Administrative Judge
Acting Chairman
Armed Services Board
of Contract Appeals



OWEN C. WILSON
Administrative Judge
Acting Vice Chairman
Armed Services Board
of Contract Appeals

I certify that the foregoing is a true copy of the Opinion and Decision of the Armed Services Board of Contract Appeals in ASBCA No. 57316, Appeal of CCI, Inc., rendered in conformance with the Board's Charter.

Dated: **MAR 19 2014**



JEFFREY D. GARDIN
Recorder, Armed Services
Board of Contract Appeals

CERTIFICATE OF SERVICE

I certify that I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the Federal Circuit by using the appellate CM/ECF system on this 14th day of August, 2014.

I certify that I served a copy of the foregoing on all counsel of record on August 14, 2014, that all participants in the case are registered users, and that service will be accomplished by the Electronic Means through the appellate CM/ECF system.

Dated this 14th day of August, 2014.

/s/ Lisa M. Marchese

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CERTIFICATE OF COMPLIANCE

I certify that:

This brief complies with the type-volume limitation of Federal Rule of Appellate Procedure 32(a)(7)(B) because this brief contains 13,992 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(a)(7)(B)(iii) and Federal Circuit Rule 32(b).

This brief complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the type style requirements of Federal Rule of Appellate Procedure 32(a)(6) because it has been prepared in a proportionally spaced typeface using Microsoft Word 2010 in size 14 point Times New Roman font.

Dated this 14th day of August, 2014.

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